



Weekly Epidemiological Bulletin

Disease early warning system and response in Pakistan

Volume 5, Issue 25, Wednesday 25 June 2014

Highlights

Epidemiological week no. 25
(15 - 21 June 2014)

- **CCHF:** During this week, 3 lab confirmed CCHF cases have been reported 2 from province Khyber Pakhtunkhwa (belongs to Afghanistan); while 1 positive case report from province Punjab (district Rawalpindi).
- In this week, **76** out of 87 districts and 2,770 out of 3,590 health facilities have reported to Disease Early Warning System (DEWS), compared to 73 districts with 2,477 health facilities shared weekly data in week 24, 2014.
- Total **1,099,762** patients consultations reported in week 25, 2014 as compared to **1,073,998** consultations in week 24, 2014.
- In this week, a total of 68 alerts generated and timely responded. Altogether 48 alerts were for Measles; 6 for Leishmaniasis; 4 each for Diphtheria and NNT; 3 for AWD; 2 for CCHF; while 1 for Bloody diarrhoea.
- 3 outbreaks were also identified and timely responded.

Figure-1: 76 out of 87 districts reported to DEWS in week 25, 2014



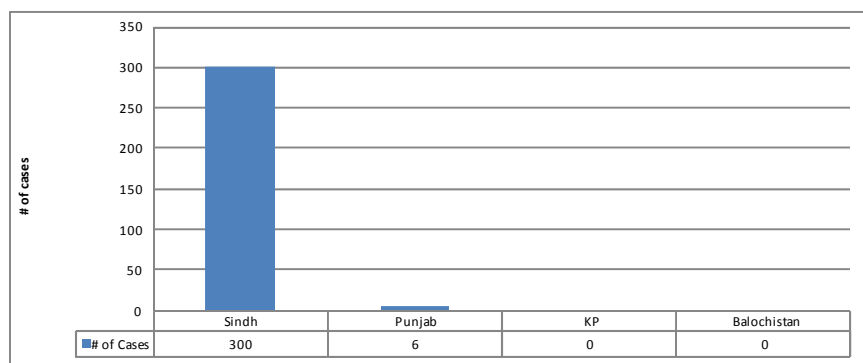
Priority diseases under surveillance in DEWS

- 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
- Scabies
- Cutaneous Leishmaniasis

Cumulative number of selected health events reported in Epi-week 1 to 25, 2014 (29 Dec 2013 to 25 June 2014)

Disease	# of Cases	Percentage
ARI	4,780,022	20.09%
Bloody diarrhoea	22,724	<1.00%
Acute diarrhoea	1,363,183	5.73%
S. Malaria	635,882	2.67%
Skin Diseases	700,627	2.94%
Unexplained fever	615,561	2.59%
All other consultations	15,582,336	65.88%
Total (All consultations)	23,793,272	100%

Figure-2: Number of Dengue fever positive cases in Pakistan, Week 1 to 25 2014



Major health events reported during the Epi-week - 25 (15 to 21 June 2014)

Disease	# of Cases	Percentage
ARI	161,153	14.65%
Bloody diarrhoea	805	<1.00%
Acute diarrhoea	71,333	6.49%
S. Malaria	25,303	2.30%
Skin Diseases	37,317	3.39%
Unexplained fever	29,529	2.69%
All other consultations	774,322	70.40%
Total (All consultations)	1,099,762	100%

From 1st January to 21st June 2014, a total of 306 lab confirmed Dengue fever cases were reported, out of these 300 positive cases were from Sindh province; while 6 positive cases were reported from Punjab province.

In 2013 Dengue fever cases were reported from many less endemic areas. A huge outbreak was confronted in district Swat and increasing number of Dengue fever cases were reported from adjacent district also and cases were also reported from Gawadar and Kech districts in Balochistan province and Karachi in Sindh province. The provincial and local health departments were supported for the Dengue control and outbreak response activities.

Number of Outbreaks (Wk-25/2014):

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
19-Jun	CCHF	Punjab	Rawalpindi	Morgah, Askari 14, Rawalpindi	0	1	0	0	A 50 year old man was reported from DHQ Hospital Rawalpindi as positive case of CCHF. Field investigations were conducted in coordination with DSC Rawalpindi and patient was found in the Emergency ward. The patient is a security guard by profession and from past 5 days developed high grade fever, sore throat, swollen foot and blood in vomits. Blood sample send to NIH came positive for CCHF whereas dengue tests were negative, Platelets count was 94000. Contacts were briefed about symptoms and CCHF precautions. Patient is stable and recovering in hospital. The detail Investigation and findings shared with EDO (H) Rawalpindi.
21-Jun	Leishmaniasis	Balochistan	Quetta	Benazir Hospital (Mariabad)	0	0	0	0	28 cases were reported by MSF from Benazir Hospital. All the information shared with DoH. Cases were investigated by MSF team at the treatment centre. All the cases were presented with different lesions on different parts of the body. Follow up and further field investigation is planned.
21-Jun	Leishmaniasis	Balochistan	Quetta	MCH Kuchlak, Quetta	0	0	0	0	16 cases reported by MSF. All the cases visited the treatment centre and obtained treatment. Investigation revealed that all the patients had lesions on different parts of the body. Information was shared with concerned quarter. Follow up is planned.

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

Disease	2013		Current week 25, 2014		2014	
	A	O	A	O	A	O
Acute watery diarrhoea	142	40	3	0	40	9
Acute jaundice syndrome	49	6	0	0	14	2
Bloody diarrhoea	45	3	1	0	21	0
CCHF	90	47	2	1	26	8
Dengue fever	300	66	0	0	6	0
Diphtheria	84	19	4	0	34	4
Measles	3357	281	48	0	756	26
Pertussis	46	10	0	0	21	2
NNT + tetanus	349	0	4	0	143	0
Malaria	25	6	0	0	0	0
Cutaneous Leishmaniasis	621	51	6	2	276	17
Others	520	5	0	0	210	5
Total	5628	534	68	3	1547	73

Figure-3: Number of alerts received and responded, week 22 to 25 2014

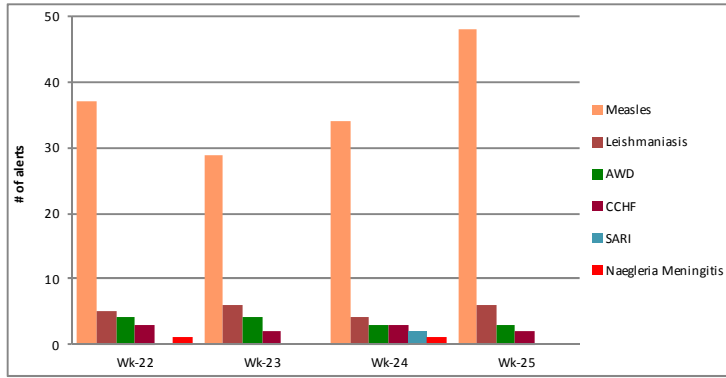
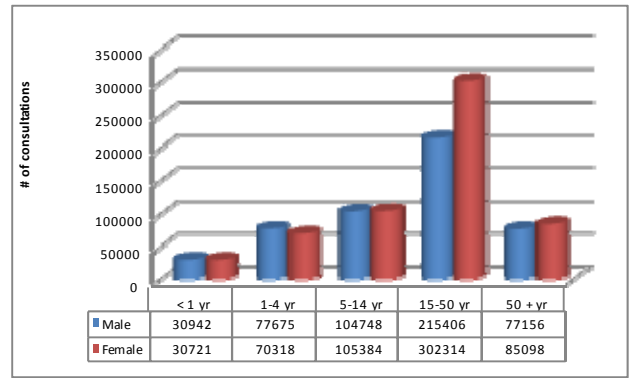
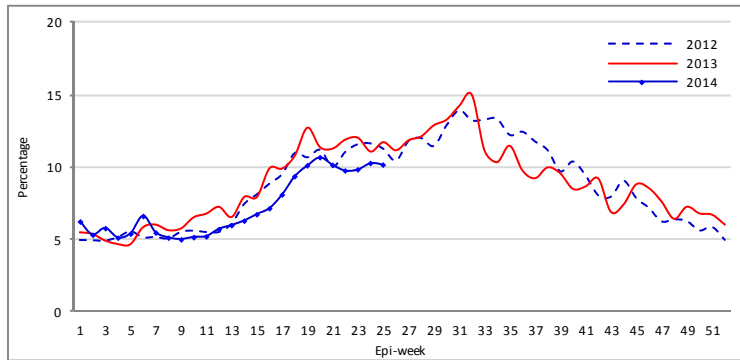


Figure-4: Number of consultations by age and gender, week 25, 2014



Province Khyber Pakhtunkhwa:

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



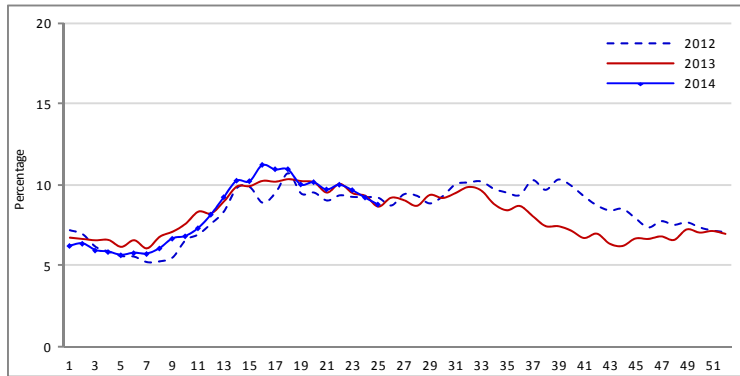
122 health facilities from 10 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 30,024 patients consultations reported in week 25, 2014.

A total of 7 alerts, 6 were for Measles; while 1 for CCHF were reported and appropriate measures were taken.

Figure-5 shows the weekly trend of Acute diarrhoea showing minor decrease and having low as compared with same time period last year.

Province Sindh:

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



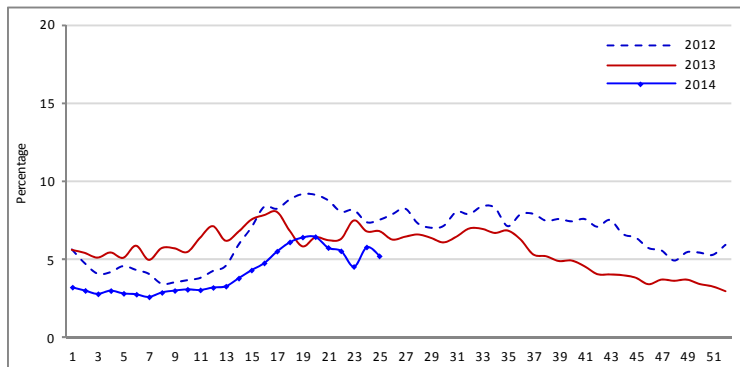
804 health facilities from 23 districts in Sindh province reported to DEWS with a total of 279,630 patient consultations in week 24, 2014.

A total of 16 alerts were received and appropriate measures were taken. Altogether 8 alerts were for Measles; 3 each for AWD and NNT; while 1 each for Diphtheria and Leishmaniasis.

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

Province Punjab:

Figure-7: Trend of Acute diarrhoea, province Punjab



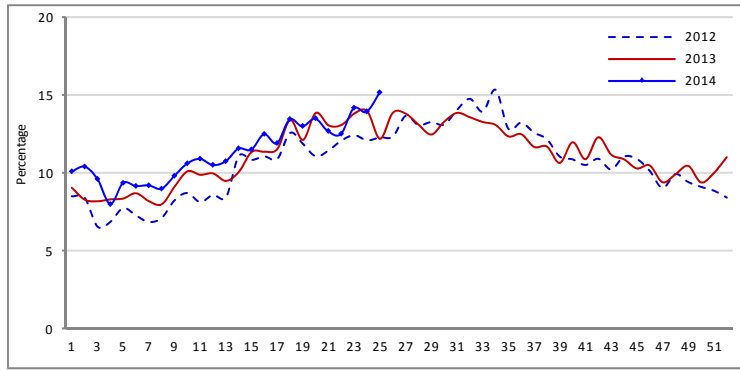
1,666 health facilities from 34 districts in Punjab province reported to DEWS with a total of 763,538 patients consultations in week 25, 2014.

Total 31 alerts were received and appropriate measures were taken. Altogether 25 alerts were for Measles; 3 for Diphtheria; while 1 each for Bloody diarrhoea, CCHF, and NNT were responded in Punjab province.

The weekly trend of Acute diarrhoea in Punjab showing 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



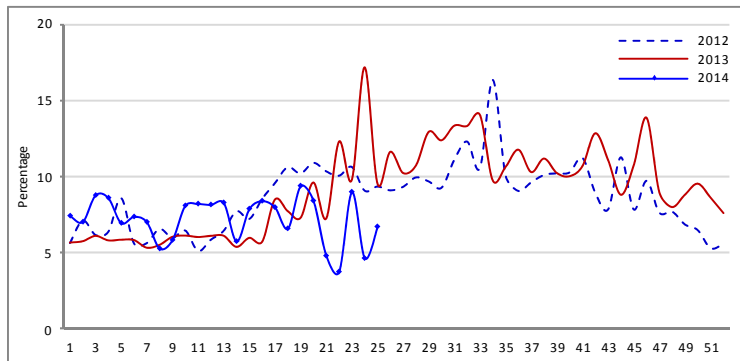
175 health facilities from 7 districts in Balochistan province reported to DEWS with a total of 25,971 patients consultations in week 25, 2014.

A total of 7 alerts were reported and appropriate measures were taken. Altogether 4 alerts were for Measles; while 3 for Leishmaniasis.

In this week the weekly proportion of AD showing increase as compared with last week, and high from the same time period last year; vigilant monitoring of the situation is required.

FATA:

Figure-9: Weekly trend of Acute diarrhoea, FATA



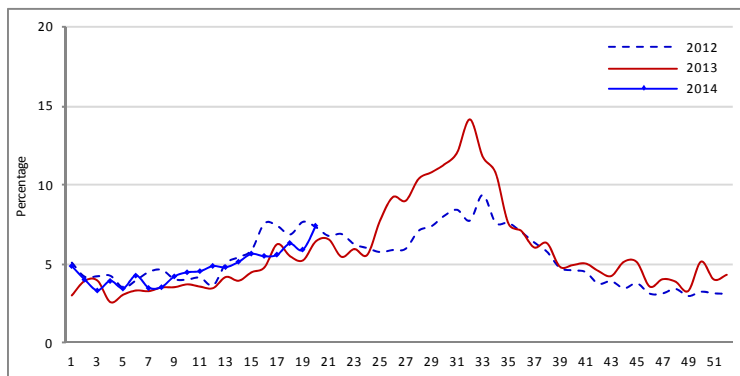
1 health facilities from 1 agency in FATA reported to DEWS with a total of 312 patients consultations in week 25, 2014.

No alert for any disease was received from any area in FATA in week 25 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



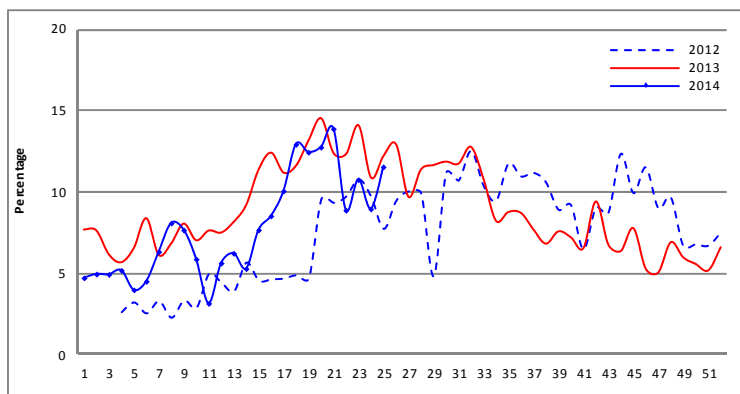
68 health facilities from 7 districts in AJ&K reported to DEWS with a total of 8,302 patients consultations in week 20, 2013.

6 alerts were reported from AJ&K and appropriate measures were taken in week 20 2014. Altogether 5 alerts were for Measles; while 1 for Leishmaniasis.

Weekly trend of AD showing increase as compared with last week and higher from same time period last year; 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 287 patients consultations in week 25, 2014.

No alert for any disease was reported from any area in Islamabad in week 25, 2014.

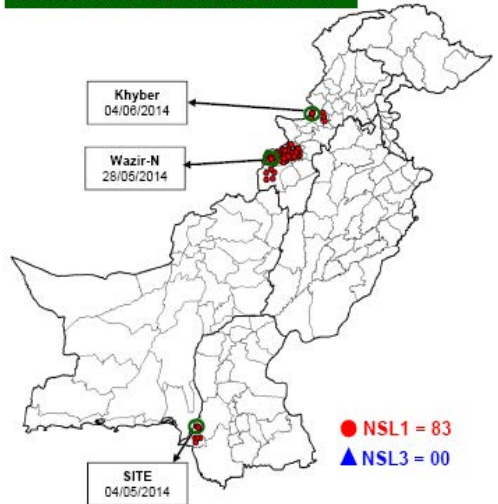
Weekly trend of AD showing spikes as the number of reporting health facilities is low from last couple of weeks, but vigilant monitoring of the situation is required.

Distribution of Wild Polio Virus cases in Pakistan 2013 and 2014

In this week 25 (15 to 21 June 2014), one new type-1 wild polio case was reported, from Federally Administered Tribal Areas (North Waziristan Agency). This brings the total number of polio cases in 2014 to 83 (compared to 19 in 2013 till this time) from 10 districts/towns/tribal agencies/FR areas (compared to 10 in 2013 till this time).

Province	2013			2014		
	P1	P3	P1+P3	P1	P3	P1+P3
Punjab	7	-	-	-	-	-
Sindh	10	-	-	6	-	-
Khyber Pakhtunkhwa	11	-	-	12	-	-
FATA	65	-	-	65	-	-
Balochistan	-	-	-	-	-	-
AJ&K	-	-	-	-	-	-
Gilgit-Baltistan	-	-	-	-	-	-
Islamabad	-	-	-	-	-	-
Total	93	-	-	83	-	-

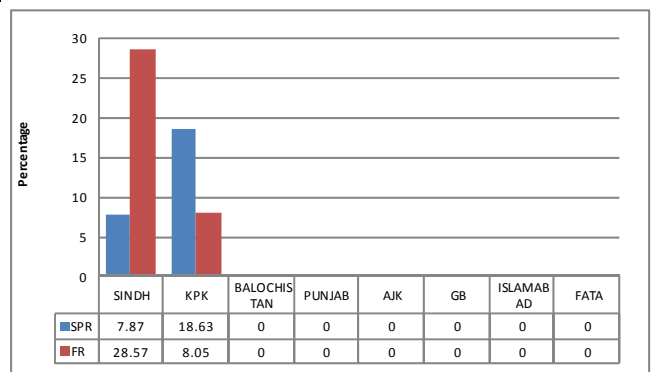
Districts/ Towns with Wild Polio cases = 10



Malaria:

The Table and chart given below shows the Malaria slide positivity and Falciparum ratio in week 25, 2014. Total number of Malaria cases tested in this week is 2,779 out of which 269 were found positive; 210 for P. Vivax; 26 for P. Falciparum; while 33 for Mixed (SPR = 9.68%; F.R = 21.93%).

Malaria tests \ Province	Sindh	KPK	Balochistan	Punjab	GB	FATA	AJK	ICT
P. Vivax	130	80	0	0	0	0	0	0
P. Falciparum	19	7	0	0	0	0	0	0
Mixed	33	0	0	0	0	0	0	0
# tested	2312	467	0	0	0	0	0	0
SPR	7.87	18.63	0	0	0	0	0	0
FR	28.57	8.05	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.

Suspected and confirmed CCHF cases are reported continuously from epidemiological week 8 2014. So far total 25 suspected cases, 14 laboratory confirmed, and 5 deaths (4 due to positive CCHF) have been reported where most of the cases are from province Balochistan Suspected cases = 12 (6 were from Afghanistan); Lab confirmed = 5, and 1 death. 6 positive cases (5 positive from Afghanistan) were reported from province Khyber Pakhtunkhwa. 4 suspected cases (1 from Afghanistan) reported from Islamabad; 1 positive and 3 deaths. 2 positive cases were reported from province Punjab (1 +ve was expired and other stable and discharged from hospital). While 1 suspected case was reported from province AJ&K district Sudhnuti and was 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 25, 2014

