



# Weekly Epidemiological Bulletin

## Disease early warning system and response in Pakistan

Volume 5, Issue 21, Wednesday 28 May 2014

### Highlights

**Epidemiological week no. 21**  
(18 to 24 May 2014)

- **Dengue fever:** During this week, no Dengue fever lab confirmed case have been reported from any province.
- In this week, **65** out of 87 districts and 2,365 out of 2,700 health facilities have reported to Disease Early Warning System (DEWS), compared to 73 districts with 2,423 health facilities shared weekly data in week 20, 2014 to the DEWS.
- Total **983,085** patients consultations reported in week 21, 2014 as compared to **976,770** consultations in week 20, 2014.
- In this week, a total of 51 alerts generated and timely responded. Altogether 33 alerts were for Measles; 4 each for CCHF and Leishmaniasis; 3 for AWD; 2 each for Acute diarrhoea and NNT; while 1 each for AJS, Diphtheria and Typhoid.
- 10 outbreaks were also identified and timely responded.

Figure-1: 65 out of 87 districts reported to DEWS in week 21, 2014



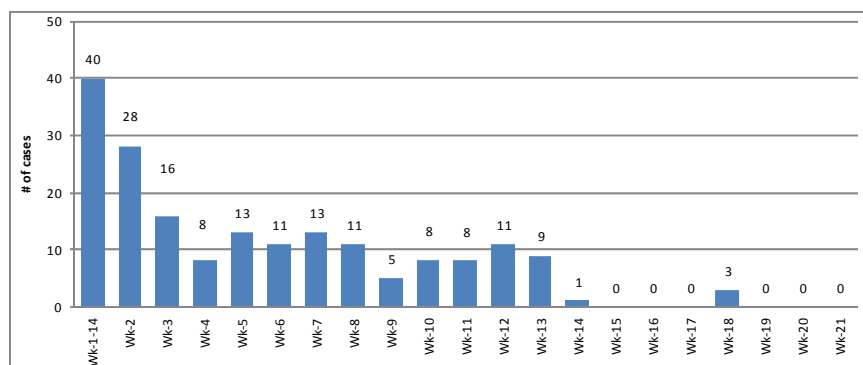
#### Priority diseases under surveillance in DEWS

- 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 21, 2014 (29 Dec 2013 to 24 May 2014)

Disease	# of Cases	Percentage
ARI	4,090,819	21.25%
Bloody diarrhoea	18,329	<1.00%
Acute diarrhoea	1,064,686	5.53%
S. Malaria	536,292	2.79%
Skin Diseases	565,764	2.94%
Unexplained fever	499,306	2.59%
All other consultations	12,472,923	64.80%
<b>Total (All consultations)</b>	<b>19,248,119</b>	<b>100%</b>

Figure-2: Number of Dengue fever positive cases in Pakistan, Week 1 to 21 2014

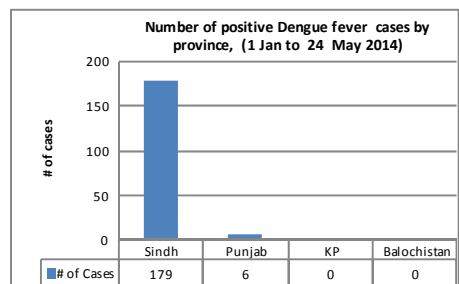


#### Major health events reported during the Epi-week - 21 (18 to 24 May 2014)

Disease	# of Cases	Percentage
ARI	164,284	16.71%
Bloody diarrhoea	799	<1.00%
Acute diarrhoea	68,369	6.95%
S. Malaria	23,642	2.40%
Skin Diseases	28,137	2.86%
Unexplained fever	23,158	2.36%
All other consultations	674,669	68.63%
<b>Total (All consultations)</b>	<b>983,058</b>	<b>100%</b>

From 1st January to 24th May 2014, a total of 185 lab confirmed Dengue fever cases were reported, out of these 179 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-21/2014):

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
22-May	CCHF	Balochistan	Quetta	Qandahar, Afghanistan	0	1	0	0	One case reported from isolation ward of FJCH. Investigation was done and found history of developing high grade fever, thereafter bleeding per rectum and gum. Case is a farmer by occupation and has contact with animals used for farming. There was no travelling history. One blood sample collected and result is awaited. Lab investigation reveals Hb 9.4 g/dl, platelets 19,000/cmm, Urea 42 mg%, Creatinine 0.8 mg%, Malaria -ve and LFTs were deranged. Supportive treatment along with 4 pints of FFPs was transfused. No other relative found with same sign and symptoms. Family was sensitized regarding CCHF.
23-May	Leishmaniasis	Balochistan	Las Bela	DHQ Uthal, Tehsil Uthal	0	6	0	3	9 clinical cases of Cutaneous Leishmaniasis were reported from DHQ Hospital Uthal. All the cases were presenting with typical lesions mostly on hands. All the cases were provided symptomatic treatment and advised to continue the treatment till further improvement.
23-May	Measles	Balochistan	Quetta	BMCH (P1 & 2 Quarry Road, P3,4 & 5 Faizabad, Saryab Road)	4	0	1	0	5 suspected Measles cases were reported from BMC Hospital. All the cases belongs to Quetta and were suffering from cough, fever, rashes and conjunctivitis. During investigation it was found that all the cases were found unvaccinated for Measles. Vit-A drops were given to all the suspected cases. DoH informed and requested to conduct the vaccination campaign in the area.
23-May	CCHF	ICT	Islamabad	PIMS (Shah Allah Ditta, Wah, Pind Sangrial, Kabul)	0	0	4	0	During last 2 weeks, 3 suspected CCHF cases were reported from PIMS. On 16 May a case was admitted at the hospital. The blood sample sent to NIH was found positive for CCHF, the patient could not survive and died on same day. Furthermore Two more deaths due to suspected CCHF were also reported from the hospital, one was on 6 May from Kabul and other on 18 May from Wah. On field investigation contact of the first case (CCHF positive) at village SHAH Alladitta was found with symptoms of fever and vomiting, later he was found positive for CCHF. He was admitted in PIMS with 18000 Platelets and haematuria but absconded on same day. Health Department through local live stock Department in Islamabad took action regarding Tick Survey and measures for its control and prevention at Shah Alladitta village.
23-May	Leishmaniasis	KPK	Mardan	Village Haji Abad, Muslim Abad, UC Mian Essa, Tehsil Takht Bhai, Mardan	4	1	5	7	17 new clinical cases of Cutaneous Leishmaniasis were reported from BHU Mian Essa. It is an continuous outbreak in UC. WHO supplied required doses of Inj-Glucantime to KPH Mardan for all registered cases. RBM, KPH were requested for vector control interventions in the areas and surrounding. on the job training of health staff was conducted for Intralesional administration of Inj-Glucantime. EDO Health and RBM focal person was informed and requested for vector control measures in the area.
20-May	BD	Punjab	Mianwali	RHC Daud Khel	4	2	5	3	Alert was generated for 14 Bloody diarrhoea cases, reported from RHC Daud Khel. During field visit, 5 adults were found to be dysentery and Hemorrhoids and not fulfill Bloody diarrhea case definition. DSC done address verified for 9 under five years of age, 5 of the patients were found from mohallah Awana-bad having population of 2500. Field visit to the patient's houses with vaccinator and LHW arranged and no epidemiological link found as patients belongs to different families living at least 30 houses apart, use separate drinking water from separate sources. Health education sessions to house holds and in the community conducted. Aqua tabs and life straw filters provided by WHO given to affected houses. LHWs requested to conduct Health education sessions in community regarding safe drinking water and personal hygiene. Information shared with DoH.

## Number of Outbreaks (Wk-21/2014):

Date	Disease	Province	District	Area	<SM	>SM	<SF	>SF	Action Taken
20-May	Leishmaniasis	Punjab	Multan	Hussain agahi, Doulat Gate Multan City	1	11	1	5	18 new cases of cutaneous Leishmaniasis were reported from Civil Hospital Multan. All the cases were diagnosed clinically. Vector surveillance activity has been conducted in the affected areas and Permethrin Fogging and IRS was conducted in affected households. 8 Health education sessions were conducted in the community with the help of Public Health Workers. Injection Glucantime were also provided to Civil Hospital and treatment of the cases has been started. The cases were advised to cover the lesions to avoid any further spread. Information shared with DoH.
17-May	AWD	Sindh	Hyderabad	Marvi town, Chaowk Taluka, Qasimabad	1	2	0	0	One AWD 9 years old male case was reported from THQ Qasimabad, Hyderabad. Case was suffering from severe dehydration and vomiting, attended nearest GP but did not cured and feels generalized weakness and severe dehydration due to continuously watery diarrhoea and vomiting. Health education imparted and sensitized regarding proper hand washing, Aqua tabs, ORS and Zinc tabs were provided. 2 water samples were collected and found unsafe for drinking. 1 stool sample was collected and Laboratory confirmed for positive Cholera. Information shared with DHO.
22-May	AWD	Sindh	Hyderabad	American Quarters Hyderabad	0	0	1	1	One AWD case was reported with severe dehydration, diarrhea and vomiting. According to the parents, The Patient attended nearest GP but did not cured and feels generalized weakness and severe dehydration due to continuously watery diarrhea and vomiting, shifted to Civil hospital, Hyderabad admitted in to Peads ward, where he is under treatment along with another cases from same family. One Stool sample and 2 water samples were taken for Lab testing and confirmation. During active search, no more cases were found. Health education imparted and sensitized regarding proper hand washing, Aqua tabs, ORS and Zinc tabs were provided to community. Information shared with DHO.
22-May	AWD	Sindh	Hyderabad	Unit no 10 Katchiabadi Taluka Latifabad	0	2	1	0	During visit of Peads ward in RHC Bhattai Hospital, Latifabad, found one AWD case with severe dehydration. According to the parents, the patient was attended nearest GP but did not cured and shifted to Taluka hospital Hyderabad. Where he is under treatment along with two more cases from same family. One Stool sample was taken. 2 water samples were taken for bacterial analysis. During active search no more new cases were found. Health education imparted and sensitized regarding proper hand washing, Aqua tabs, ORS and Zinc tabs were provided. Information shared with DHO.

Figure-3: Number of alerts received and responded, week 18 to 21 2014

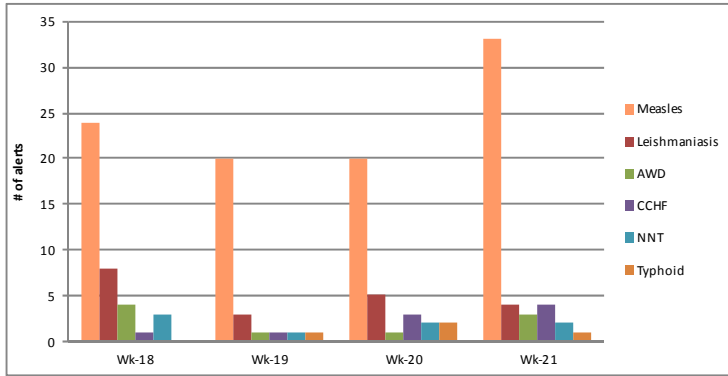
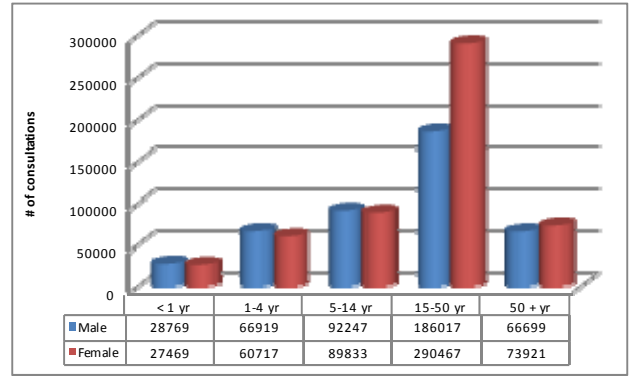
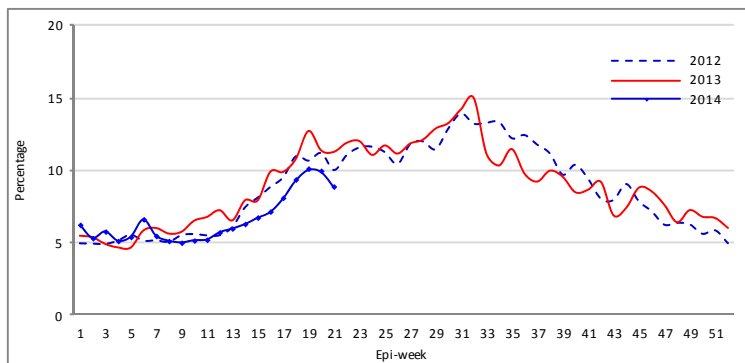


Figure-4: Number of consultations by age and gender, week 21, 2014



Province Khyber Pakhtunkhwa:

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



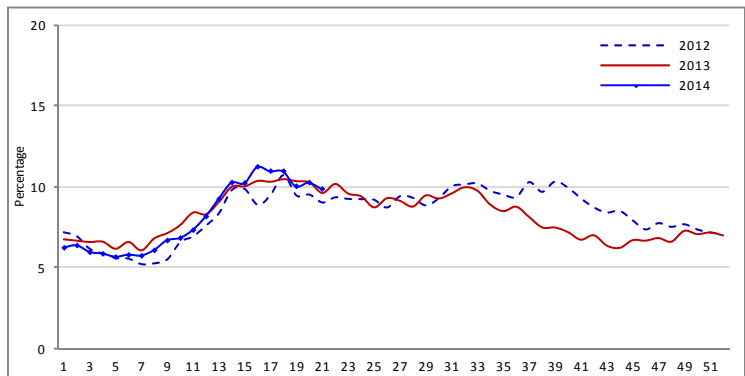
71 health facilities from 8 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 24,603 patients consultations reported in week 21, 2014.

A total of 5 alerts were reported and appropriate measures were taken. Altogether 2 alerts were for Measles; while 1 each for AWD, CCHF and Diphtheria.

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

Province Sindh:

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



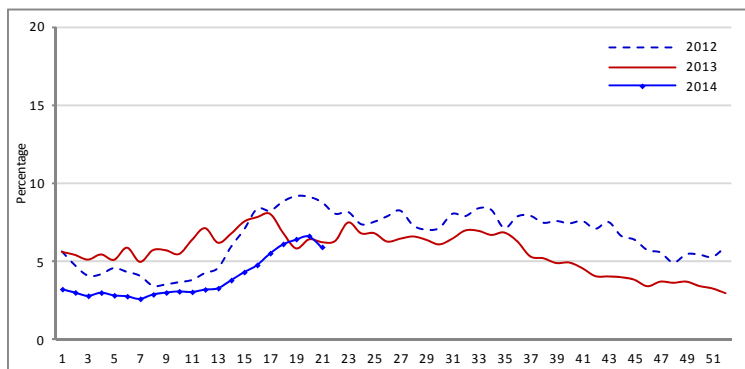
751 health facilities from 23 districts in Sindh province reported to DEWS with a total of 251,391 patient consultations in week 21, 2014.

A total of 17 alerts were received and appropriate measures were taken. Altogether 13 alerts were for Measles; while 2 each for AWD and NNT.

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

Province Punjab:

Figure-7: Trend of Acute diarrhoea, province Punjab



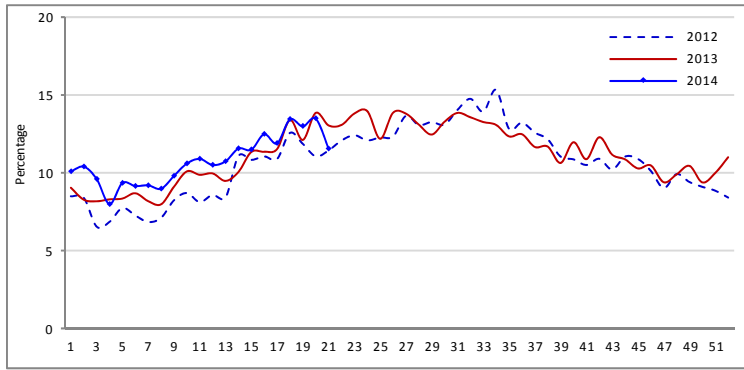
1,391 health facilities from 27 districts in Punjab province reported to DEWS with a total of 684,783 patients consultations in week 21, 2014.

Total 17 alerts were received and appropriate measures were taken. Altogether 13 alerts each were for Measles; 2 for Acute diarrhoea; while 1 each for CCHF and Typhoid were responded in Punjab province.

The weekly trend of Acute diarrhoea in Punjab showing 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



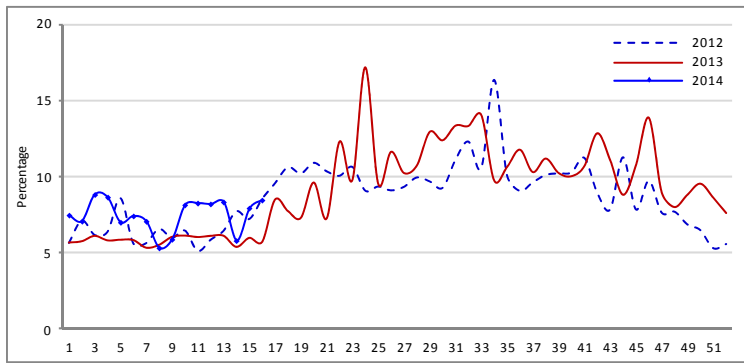
147 health facilities from 6 districts in Balochistan province reported to DEWS with a total of 21,009 patients consultations in week 21, 2014.

A total of 7 alerts were reported and appropriate measures were taken. Altogether 4 alerts were for Measles; while 1 each for AJS; CCHF and Leishmaniasis.

In this week the weekly proportion of AD showing decrease as compared with last week and low from the same time period last year, but vigilant monitoring of the situation required.

FATA:

Figure-9: Weekly trend of Acute diarrhoea, FATA



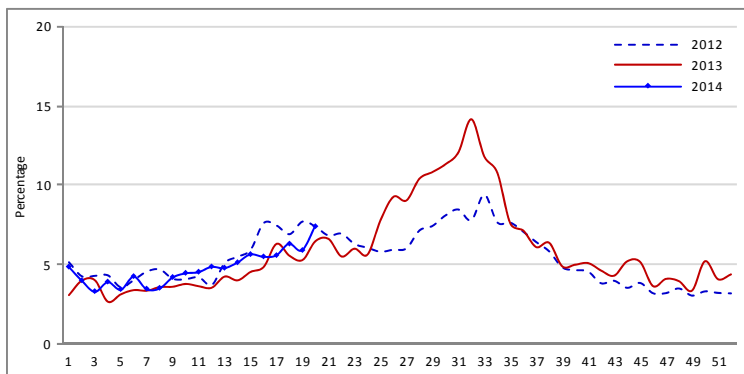
19 health facilities from 2 agencies in FATA reported to DEWS with a total of 4,793 patients consultations in week 16, 2014.

4 alerts were received and responded in FATA in week 16, 2014. Altogether 2 alerts were for Leishmaniasis; while 1 each for Measles and NNT.

The proportion of ARI showing increase, while Pneumonia also shows increase as compared with last week.

State of Azad Jammu and Kashmir:

Figure-10: Weekly trend of Acute diarrhoea, AJ&K



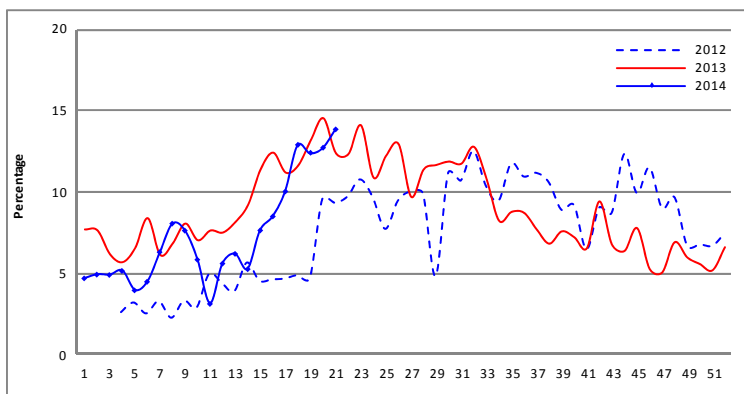
68 health facilities from 7 districts in AJ&K reported to DEWS with a total of 8,302 patients consultations in week 20, 2013.

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



5 health facilities reported to DEWS on time with a total of 1,272 patients consultations in week 21, 2014.

One alert/outbreak of CCHF was reported from Islamabad in week 21, 2014.

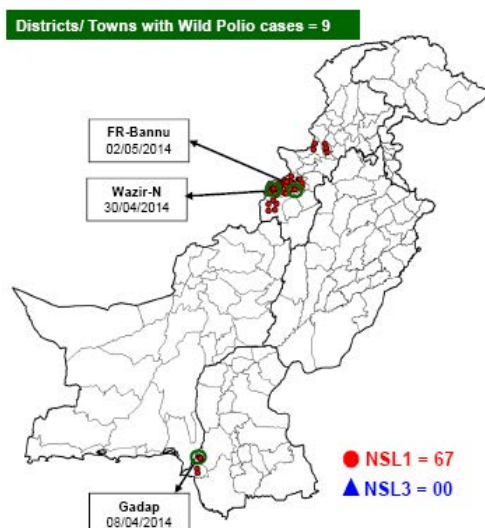
Weekly trend of AD showing continuously increase from last couple of weeks, and vigilant monitoring of the situation is required.



Distribution of Wild Polio Virus cases in Pakistan 2013 and 2014

In this week 21 (18 to 24 May 2014), one new type-1 wild polio case has been reported from Federally Administered Tribal Areas (FR Bannu). This brings the total number of polio cases in 2014 to 67 (compared to 17 in 2013 till this time) from 9 districts/towns/tribal agencies/FR areas (compared to 10 in 2013 till this time).

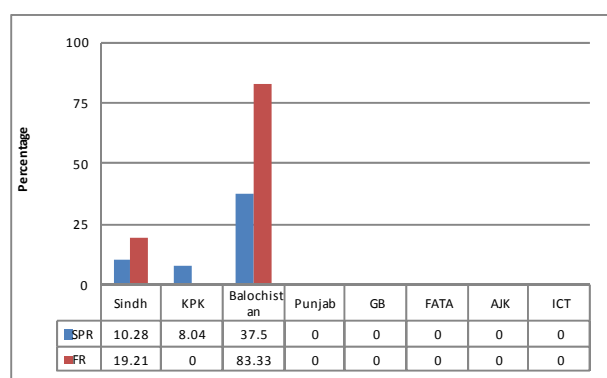
Province	2013			2014		
	P1	P3	P1+P3	P1	P3	P1+P3
Punjab	7	-	-	-	-	-
Sindh	10	-	-	5	-	-
Khyber Pakhtunkhwa	11	-	-	9	-	-
FATA	65	-	-	53	-	-
Balochistan	-	-	-	-	-	-
AJ&K	-	-	-	-	-	-
Gilgit-Baltistan	-	-	-	-	-	-
Islamabad	-	-	-	-	-	-
<b>Total</b>	<b>93</b>	<b>-</b>	<b>-</b>	<b>67</b>	<b>-</b>	<b>-</b>



Malaria:

The Table and chart given below shows the Malaria slide positivity and Falciparum ratio in week 21, 2014. Total number of Malaria cases tested in this week is 2,300 out of which 233 were found positive; 189 for P. Vivax; 20 for P. Falciparum; while 24 for Mixed (SPR = 10.13%; F.R = 18.88%).

Malaria tests \ Province	Sindh	Balochistan	KPK	Punjab	GB	FATA	AJK	ICT
P. Vivax	143	2	44	0	0	0	0	0
P. Falciparum	10	10	0	0	0	0	0	0
Mixed	24	0	0	0	0	0	0	0
# tested	1721	32	547	0	0	0	0	0
SPR	10.28	37.5	8.04	0	0	0	0	0
FR	19.21	83.33	0	0	0	0	0	0



Focus 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 15 suspected cases, 5 laboratory confirmed, and 5 deaths (4 due to positive CCHF) have been reported where most of the cases are from province Balochistan Suspected cases = 9 (5 were from Afghanistan); Lab confirmed = 2, and 1 death. 4 suspected cases (1 from Afghanistan) reported from Islamabad; 1 positive and 3 deaths. While 1 each case was reported from AJ&K (-ve) and province Punjab (+ve and expired).

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 21, 2014

