



Weekly Epidemiological Bulletin

Disease early warning system and response in Pakistan

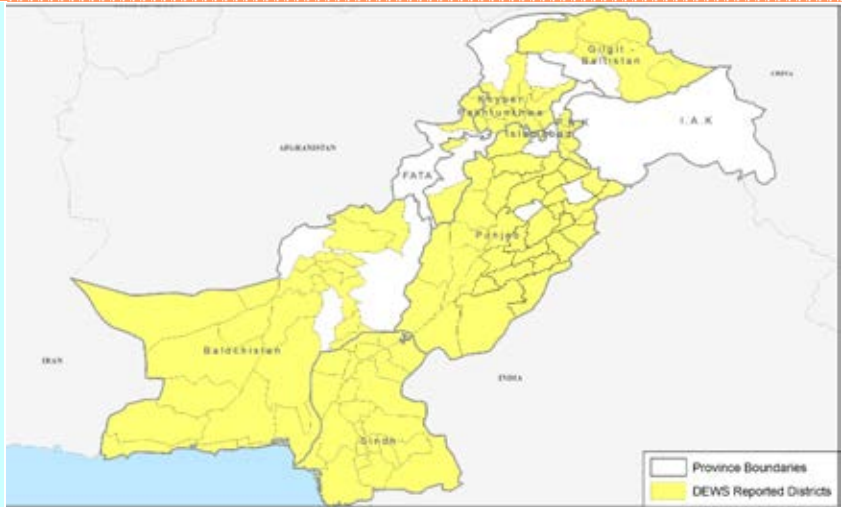
Volume 5, Issue 28, Wednesday 16 July 2014

Highlights

Epidemiological week no. 28
(6 - 12 July 2014)

- **CCHF:** During this week, 2 laboratory confirmed CCHF cases (1 belongs to Afghanistan) and 2 deaths have been reported from Khyber Pakhtunkhwa province; (3 out of 7 suspected cases belongs to Afghanistan and were brought to Pakistan for treatment).
- In this week, **75** out of 87 districts and 2,981 out of 3,590 health facilities have reported to Disease Early Warning System (DEWS), compared to 76 districts with 2,925 health facilities shared weekly data in week 27, 2014.
- Total **1,081,287** patients consultations reported in week 28, 2014 as compared to **1,051,721** consultations in week 27, 2014.
- In this week, a total of 67 alerts generated and timely responded. Altogether 35 alerts were for Measles; 8 for Leishmaniasis; 7 for CCHF; 5 for NNT; 2 each for Acute diarrhoea, Dengue fever and Naegleria Meningitis; while 1 each for Acute Watery Diarrhoea, Bloody diarrhoea, AJS, H1N1, Tetanus and Typhoid fever.

Figure-1: 75 out of 87 districts reported to DEWS in week 28, 2014



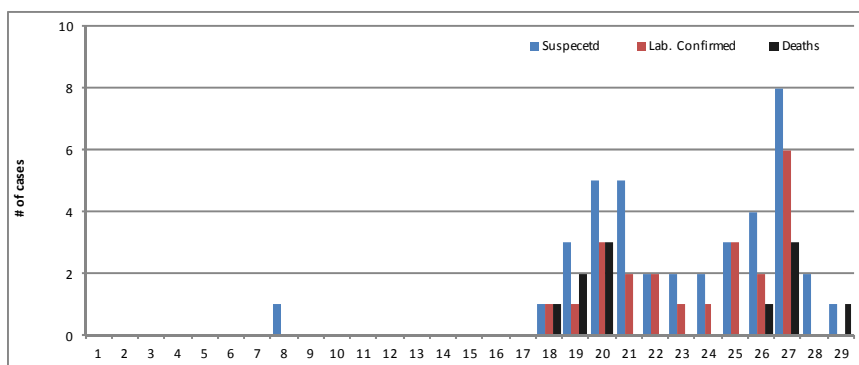
Priority diseases under surveillance in DEWS

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 28, 2014 (29 Dec 2013 to 12 July 2014)

Disease	# of Cases	Percentage
ARI	5,272,494	19.44%
Bloody diarrhoea	26,019	<1.00%
Acute diarrhoea	1,568,099	5.78%
S. Malaria	710,728	2.62%
Skin Diseases	818,379	3.02%
Unexplained fever	702,043	2.59%
All other consultations	18,025,919	66.46%
Total (All consultations)	27,123,681	100%

Figure-2: Weekly number of CCHF cases and deaths in Pakistan, week 1 to 28 2014



Major health events reported during the Epi-week - 28(6 - 12 July 2014)

Disease	# of Cases	Percentage
ARI	158,386	14.65%
Bloody diarrhoea	950	<1.00%
Acute diarrhoea	69,110	6.39%
S. Malaria	25,329	2.34%
Skin Diseases	40,456	3.74%
Unexplained fever	26,645	2.46%
All other consultations	760,411	70.32%
Total (All consultations)	1,081,287	100%

Crimean Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8, 2014. So far total 42 suspected cases, 22 laboratory confirmed, and 11 deaths (of these 7 laboratory confirmed) have been reported. Most of the cases are from Balochistan province 18 suspected (9 cases belongs to Afghanistan), 9 Laboratory confirmed and 2 deaths. 8 Laboratory confirmed (6 from Afghanistan) were reported from Khyber Pakhtunkhwa province. 4 suspected cases (1 from Afghanistan), 2 Laboratory confirmed and 3 deaths (due to suspected CCHF) were reported from Islamabad. 4 suspected CCHF cases (3 Laboratory confirmed), 3 deaths (2 Lab confirmed) reported from Punjab province. While 1 suspected case was from district Sudhnuti (AJK) and was negative for CCHF.

The CCHF cases from Afghanistan are detected and reported from Quetta and Peshawar because 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-28/2014):

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
8-Jul	AWD	Balochistan	Awaran	Nondra, UC camp Jhaoo, Tehsil Jhal Jhaoo	0	0	0	0	An alert for AWD cases was reported by DC Awaran. Investigation was conducted by team comprising of WHO focal person, DOH (RRT) and armed medical forces. Health and hygiene sessions were conducted in different community sessions. All the cases were treated in their respective health facilities. Health awareness session was conducted among affected families. Information shared with all the relevant stakeholder.
6-Jul	Measles	Balochistan	Quetta	(BMCH) Podgulli Chowk, Sabzal Road	3	1	2	0	Four suspected Measles cases were reported from BMC hospital. All cases having cough, fever, conjunctivitis, chest congestions, runny nose and maculopapular rashes. During field investigation 2 more suspected Measles cases identified. None of them were found vaccinated for measles. 4 blood samples were collected and sent to NIH for lab confirmations. All suspected cases were given 2 doses of Vit-A. Health education was imparted to the parents on importance of routine immunization. Information shared with DHO and requested to send the teams for out-reach vaccination.
10-Jul	CCHF	Khyber Pakhtunkhwa	Bannu	Mira Khel, Ghori Wala, Bannu	0	1	0	0	54 years old man, butcher by profession, belonged to Mira Khel, UC Ghori Wala, district Bannu, became sick on 2nd July when he developed fever, severe body aches and dehydration. He was treated at DHQ hospital Bannu but not improved and was referred to Peshawar and got admitted in Medical Ward of HMC in Isolation Room. He developed Bruises under the skin all over the body. At the time of admission his platelets were 12000. 1 blood sample taken and found positive for CCHF. The patient could not survive and expired on 11-7-2014.
9-Jul	CCHF	Khyber Pakhtunkhwa	Peshawar	Kundus, Near Mazare Shareef, Afghanistan	0	0	0	1	25 years old female patient was admitted in Hayatabad Medical Complex with complaints of fever, generalized weakness admitted on 9-7-2014. The patient belongs to Kundus, Afghanistan. Bleeding from gums started for the last 2 days from date of admission. Positive contact history with animals present in the home. Patient was put on Ribavirine therapy along with supportive treatment. Platelets were 23000 on admission. 1 blood sample taken and sent to NIH found positive for CCHF.
11-Jul	Leishmaniasis	Khyber Pakhtunkhwa	Mardan	Village & UC Kohi Bermol, Tehsil Katlang, Mardan	1	1	2	4	8 clinical cases of Cutaneous Leishmaniasis were reported from BHU Kohi Bermol, Tehsil Katlang. WHO supplied required doses of Inj-Glucantime to KPH Mardan for all the registered cases. RBM, KPH were requested for vector control interventions in the area and surroundings. On the job training of health staff was conducted for Intralesional administration of Inj-Glucantime. RBM focal person was informed and requested for vector control measures in the area. EDO Health and focal person was informed.
11-Jul	Leishmaniasis	Khyber Pakhtunkhwa	Mardan	Village Haji Abad, Muslim Abad, UC Mian Essa, Tehsil Takht Bhai, Mardan	1	2	1	6	10 clinical cases of Cutaneous Leishmaniasis were reported from BHU Mian Essa. 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 surroundings. On the job training of health staff was conducted for Intralesional administration of Inj-Glucantime. RBM focal person was informed and requested for vector control measures in the areas. EDO Health and focal person was informed.
11-Jul	AJS	Punjab	Multan	Ghanta Ghar, Doulat Gate Multan	1	6	1	0	Around forty cases of Acute Jaundice Syndrome were reported from Civil Hospital Multan. Investigations revealed that the patients belong to different areas in Multan (Basti Malook, Khanewal, Lar and Kabirwala). Most of the cases were distributed sporadically in 3 districts but a cluster of 6 cases was reported from Ghanta Ghar, Doulat gate and Bohar Gate area of the walled city. 2 suspected cases were identified with jaundice during active surveillance and were referred to Civil Hospital. Blood samples of 2 cases were tested and found positive for hepatitis A on Elisa. Aqua tabs were distributed in the selected households and localities from where the cases were reported. Health education sessions were conducted on food safety and safe drinking water by Public Health workers. The locality is among densely populated parts of old city where water supply is already compromised with sewerage lines. DOH also took up the issue with WASA for ensuring ample chlorination of water in these areas.

Figure-3: Number of alerts received and responded, week 25 to 28 2014

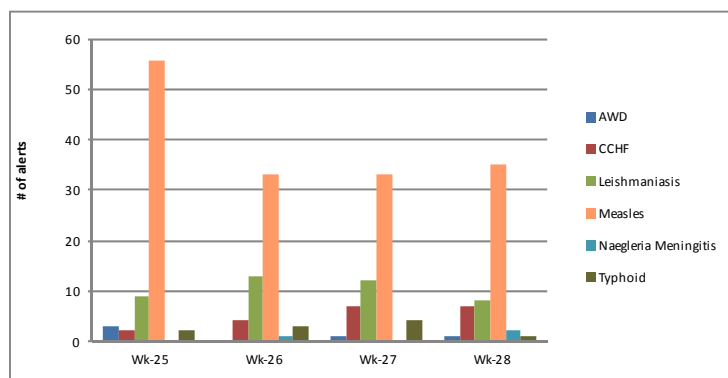
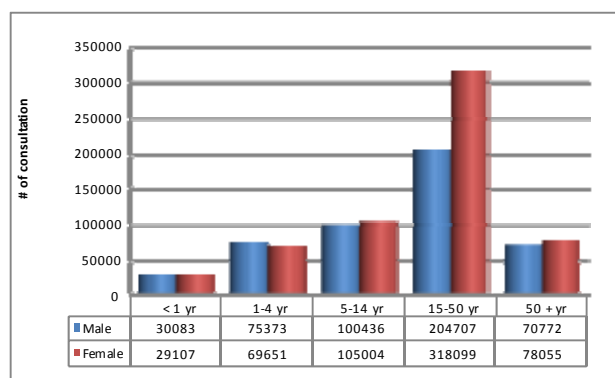
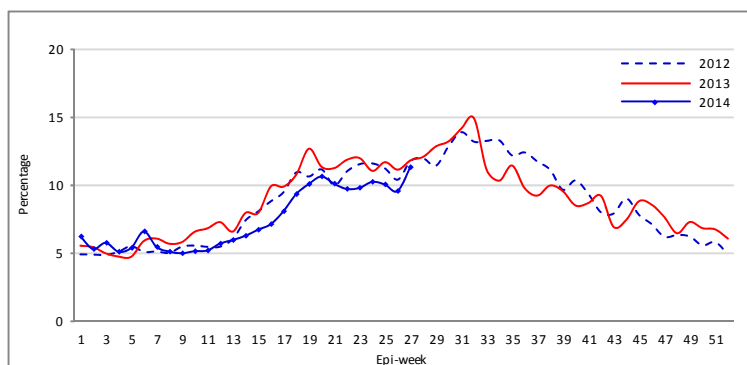


Figure-4: Number of consultations by age and gender, week 28, 2014



Province Khyber Pakhtunkhwa:

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



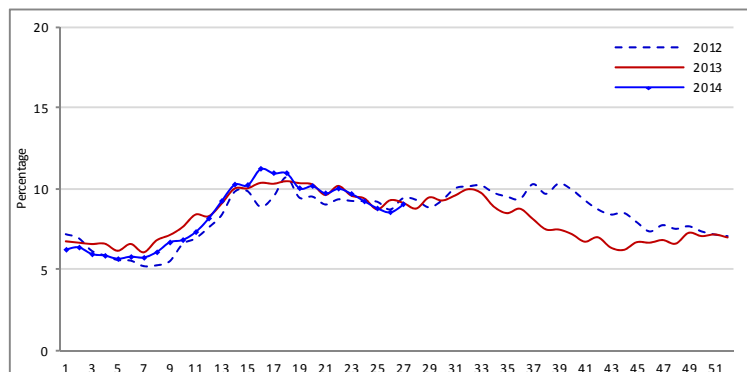
153 health facilities from 11 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 31,919 patients consultations reported in week 28, 2014.

A total of 17 alerts, 8 were for Measles; 7 were for CCHF; while 2 for Leishmaniasis were reported and appropriate measures were taken.

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

Province Sindh:

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



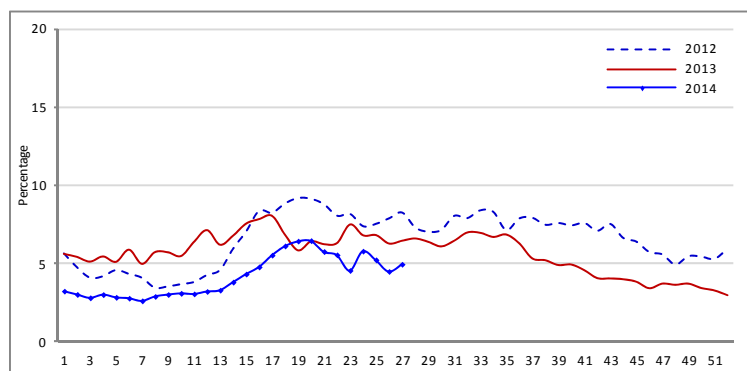
840 health facilities from 23 districts in Sindh province reported to DEWS with a total of 293,147 patient consultations in week 28, 2014.

A total of 12 alerts were received and appropriate measures were taken. Altogether 5 alerts were for NNT; 2 each for Leishmaniasis, Measles and Naegleria Meningitis; while 1 for H1N1.

The proportion of AD for the province is showing increase 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



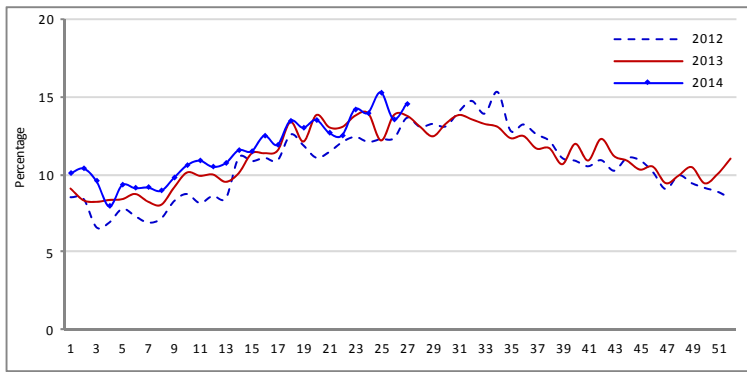
1,778 health facilities from 31 districts in Punjab province reported to DEWS with a total of 723,094 patients consultations in week 28, 2014.

Total 25 alerts were received and appropriate measures were taken. Altogether 20 alerts were for Measles; 2 for Acute diarrhoea; while 1 each for AJS, bloody diarrhoea and Typhoid fever were responded in Punjab province.

The weekly trend of Acute diarrhoea in Punjab showing 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



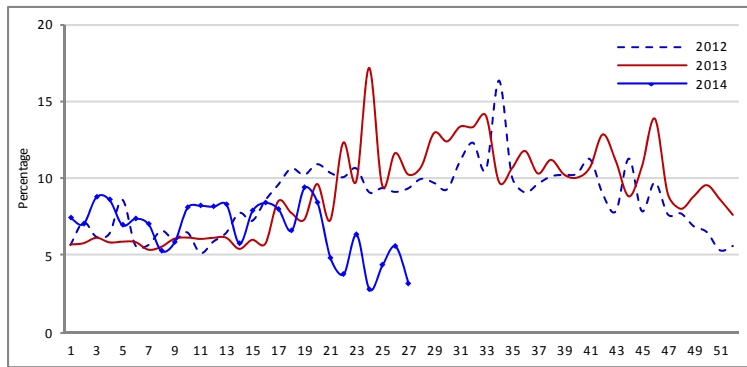
206 health facilities from 8 districts in Balochistan province reported to DEWS with a total of 32,026 patients consultations in week 28, 2014.

A total of 8 alerts were reported and appropriate measures were taken. Altogether 2 alerts each for Measles, Leishmaniasis and Dengue fever; while 1 each for AWD and Tetanus.

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

FATA:

Figure-9: Weekly trend of Acute diarrhoea, FATA



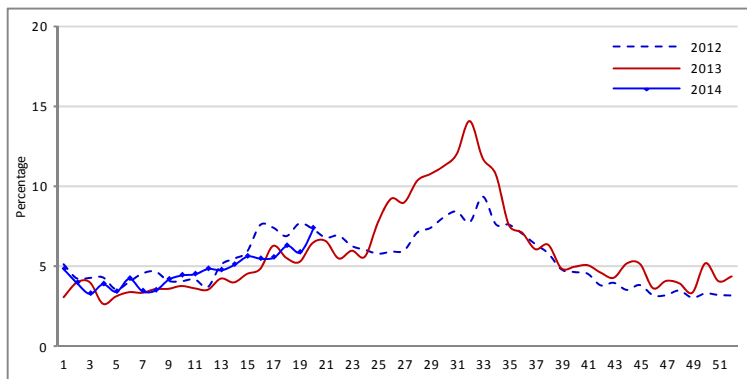
1 health facilities from 1 agency in FATA reported to DEWS with a total of 622 patients consultations in week 28, 2014.

No alert for any disease was received from any area in FATA in week 28 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



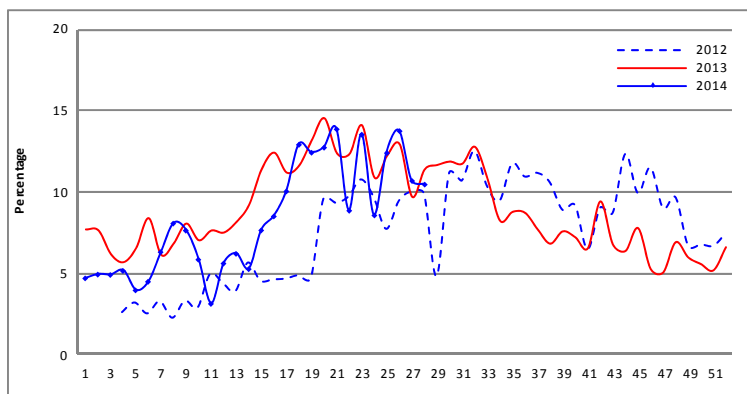
68 health facilities from 7 districts in AJ&K reported to DEWS with a total of 8,302 patients consultations in week 20, 2013.

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



3 health facilities reported to DEWS on time with a total of 479 patients consultations in week 28, 2014.

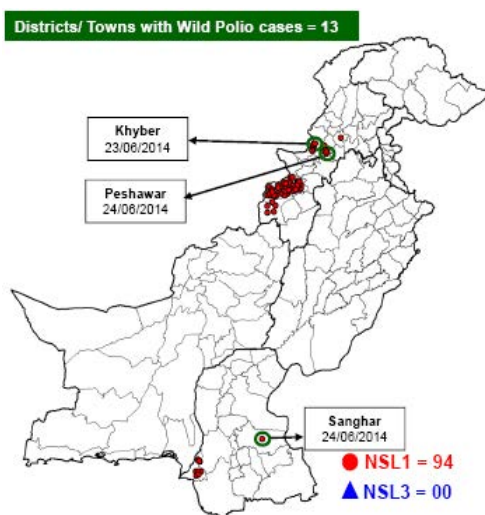
1 alert for Measles was reported in Islamabad in week 28, 2014.

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 28 (6 to 12 July 2014), four new type-1 wild polio virus (WPV) cases were reported, two from Federally Administered Tribal Areas (Khyber Agency) and one each from Khyber Pakhtunkhwa (Peshawar) and Sindh (Sanghar). The polio case from Sanghar is the first one reported in 2014 from outside the reservoir and outbreak areas. This brings the total number of polio cases in 2014 to 94 (compared to 24 in 2013 till this time) from 13 districts/towns/tribal agencies/FR areas (compared to 12 in 2013 till this time).

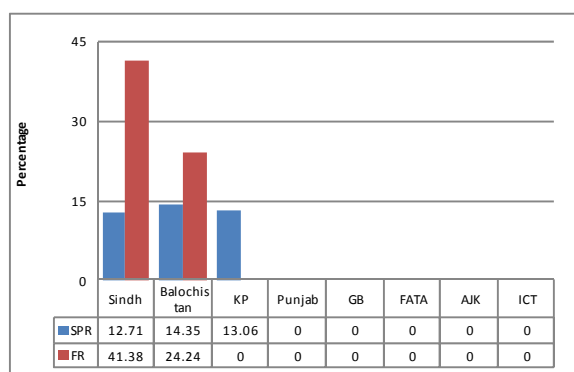
Province	2013			2014		
	P1	P3	P1+P3	P1	P3	P1+P3
Punjab	7	-	-	-	-	-
Sindh	10	-	-	8	-	-
Khyber Pakhtunkhwa	11	-	-	16	-	-
FATA	65	-	-	70	-	-
Balochistan	-	-	-	-	-	-
AJ&K	-	-	-	-	-	-
Gilgit-Baltistan	-	-	-	-	-	-
Islamabad	-	-	-	-	-	-
Total	93	-	-	94	-	-



Malaria:

The Table and chart given below shows the Malaria Slide Positivity and Falciparum Ratio in week 26, 2014. Total number of Malaria cases tested in this week is 4,083 out of which 543 were found positive; 375 for P. Vivax; 67 for P. Falciparum; while 101 for Mixed (SPR = 13.30%; F.R = 30.94%).

Malaria tests \ Province	Sindh	Balochistan	Khyber Pakhtunkhwa	Punjab	GB	FATA	AJK	ICT
P. Vivax	170	150	55	0	0	0	0	0
P. Falciparum	21	46	0	0	0	0	0	0
Mixed	99	2	0	0	0	0	0	0
# tested	2282	1380	421	0	0	0	0	0
SPR	12.71	14.35	13.06	0	0	0	0	0
FR	41.38	24.24	0	0	0	0	0	0



Follow up on: CCHF

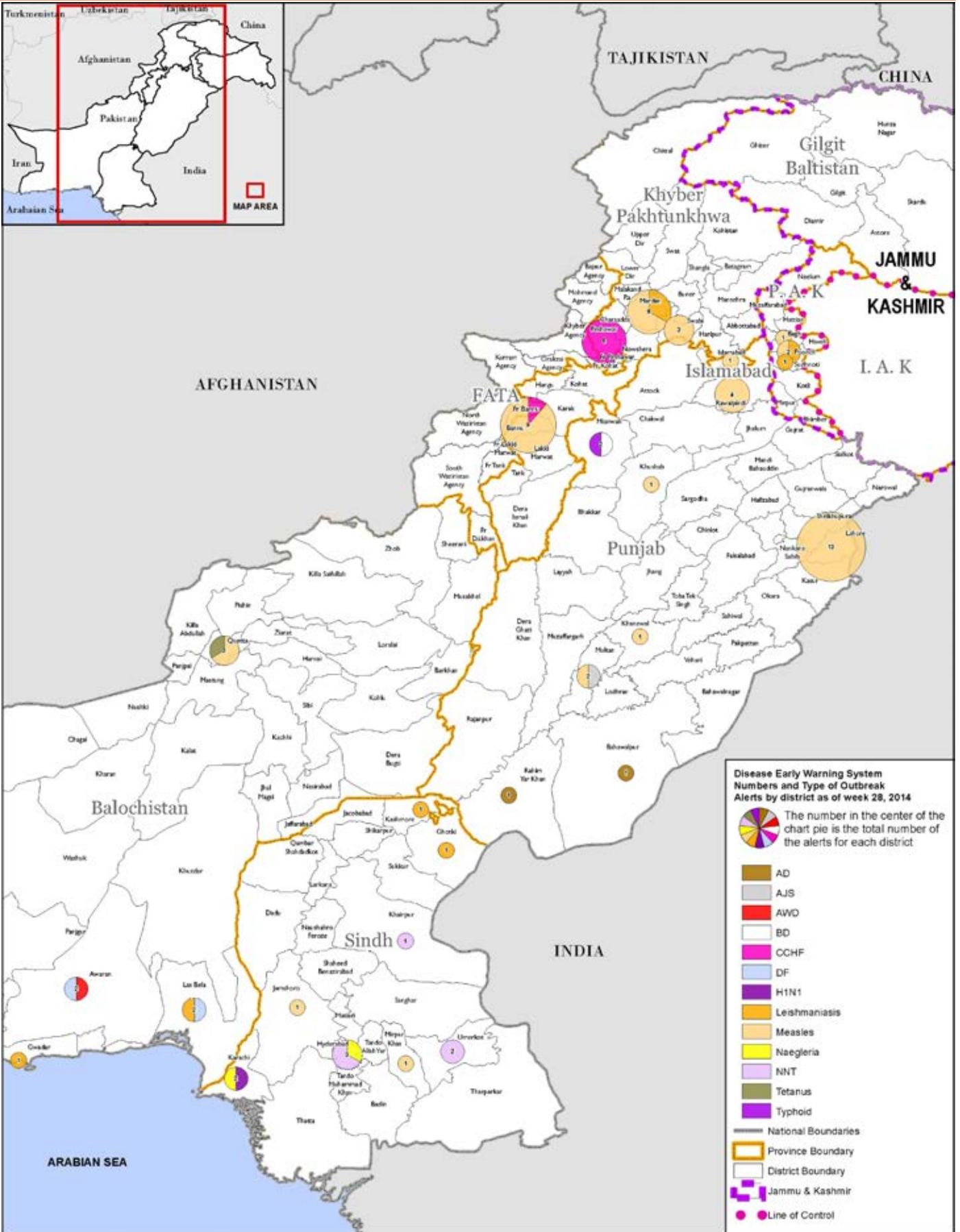
CCHF is a serious viral hemorrhagic fever with up to 50% case fatality rate, caused by an RNA virus of family Bunyaviridae, genus Nairovirus, carried by Hyalomma species of ticks. Human beings become infected by tick bites or crushing the ticks, which are usually found on sheep, cattle, goats or camels, 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.

Crimean Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8, 2014. So far total 42 suspected cases, 22 laboratory confirmed, and 11 deaths (of these 7 Laboratory confirmed) have been reported. Most of the cases are from Balochistan province 18 suspected (9 cases belongs to Afghanistan), 9 Laboratory confirmed and 2 deaths. 8 Laboratory confirmed (6 from Afghanistan) were reported from Khyber Pakhtunkhwa province. 4 suspected cases (1 from Afghanistan), 2 Laboratory confirmed and 3 deaths (due to suspected CCHF) were reported from Islamabad. 4 suspected CCHF cases (3 Laboratory confirmed), 3 deaths (2 Lab confirmed) reported from Punjab province. While 1 suspected case was from district Sudhnuti (AJK) 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 28 2014



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