



Weekly Epidemiological Bulletin

Disease early warning system and response in Pakistan

Volume 5, Issue 44, Wednesday 5 November 2014

Highlights

Epidemiological week no. 44
(26 Oct - 1 Nov 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 2,525 out of 3,590 health facilities have reported to Disease Early Warning System (DEWS), compared to 83 districts with 2,747 health facilities shared weekly data in week 43, 2014.
- A total of **1,169,938** patients consultations reported in this week 44, 2014.
- In this week, a total of 28 alerts generated and timely responded. Altogether 8 alerts were for Leishmaniasis; 6 each for Dengue fever and Measles; 3 for CCHF; 2 for Acute diarrhoea; while 1 each for Naegleria Meningitis, Typhoid fever and Scabies.
- 1 outbreak was also identified and timely responded.

Figure-1: 83 out of 87 districts reported to DEWS in week 44, 2014



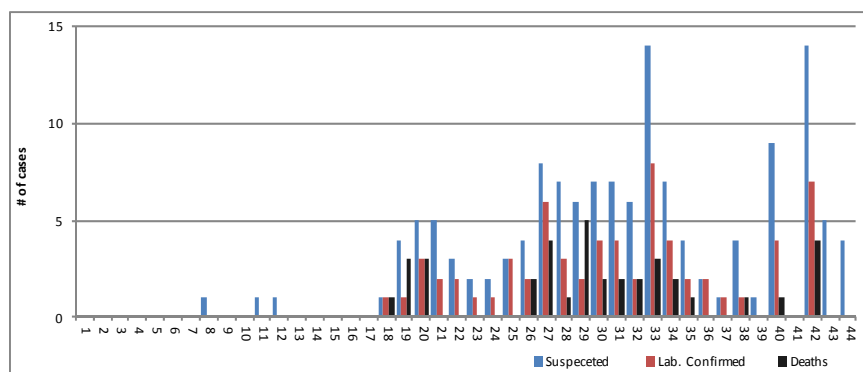
Priority diseases under surveillance in DEWS

- 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 44, 2014 (29 Dec 2013 to 1 November 2014)

| Disease | # of Cases | Percentage |
|----------------------------------|-------------------|-------------|
| ARI | 8,309,868 | 18.55% |
| Bloody diarrhoea | 46,080 | <1.00% |
| Acute diarrhoea | 2,559,348 | 5.71% |
| S. Malaria | 1,128,291 | 2.52% |
| Skin Diseases | 1,416,118 | 3.16% |
| Unexplained fever | 1,144,498 | 2.55% |
| All other consultations | 30,204,931 | 67.41% |
| Total (All consultations) | 44,809,134 | 100% |

Figure-2: Weekly number of CCHF cases and deaths in Pakistan, week 1 to 44 2014



Major health events reported during the Epi-week - 44 (26 Oct - 1 Nov 2014)

| Disease | # of Cases | Percentage |
|----------------------------------|------------------|-------------|
| ARI | 212,623 | 20.91% |
| Bloody diarrhoea | 1,410 | <1.00% |
| Acute diarrhoea | 45,534 | 4.48% |
| S. Malaria | 21,048 | 2.07% |
| Skin Diseases | 28,083 | 2.76% |
| Unexplained fever | 26,180 | 2.57% |
| All other consultations | 682,060 | 67.07% |
| Total (All consultations) | 1,016,938 | 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-44/2014):

| Date | Disease | Province | District | Area | <5M | >5M | <5F | >5F | Action Taken |
|--------|---------------|--------------------|----------|---|-----|-----|-----|-----|---|
| 29-Oct | Leishmaniasis | Balochistan | Lasbela | Bela, Tehsil Bela | 1 | 3 | 4 | 1 | Alerts for 9 suspected Cutaneous Leishmaniasis cases were reported from Civil Hospital Bela. During investigation all the cases were found with lesions mostly on feet. none of the case had any travelling history. RBM focal person was informed and requested for vector control measures in the area. Information shared with DHO. |
| 1-Nov | Leishmaniasis | Khyber Pakhtunkhwa | Mardan | Village & UC Kohi Bermol, Tehsil Katlang, Mardan | 0 | 0 | 1 | 1 | Alert for 2 clinical cases of Cutaneous Leishmaniasis were reported from BHU Kohi Bermol. WHO supplied required doses of Inj Glucantime to KPH Mardan for all registered cases. On 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. |
| 1-Nov | Leishmaniasis | Khyber Pakhtunkhwa | Mardan | Village Haji Abad, Muslim Abad, UC Mian Essa, Tehsil Takht Bhai, Mardan | 0 | 0 | 0 | 2 | Alert for 2 clinical cases of Cutaneous Leishmaniasis were reported from BHU MianEssa. WHO supplied required doses of Inj Glucantime to KPH Mardan for all registered cases. On 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 areas. |

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

| Disease | 2013 | | Current week 44, 2014 | | 2014 | |
|-------------------------|-------------|------------|-----------------------|----------|-------------|------------|
| | A | O | A | O | A | O |
| Acute watery diarrhoea | 142 | 40 | 0 | 0 | 68 | 15 |
| Acute jaundice syndrome | 49 | 6 | 0 | 0 | 18 | 3 |
| Bloody diarrhoea | 45 | 3 | 0 | 0 | 52 | 0 |
| CCHF | 90 | 47 | 3 | 0 | 120 | 58 |
| Dengue fever | 300 | 66 | 6 | 0 | 78 | 12 |
| Diphtheria | 84 | 19 | 0 | 0 | 64 | 5 |
| Measles | 3357 | 281 | 6 | 0 | 1255 | 32 |
| Pertussis | 46 | 10 | 0 | 0 | 27 | 2 |
| NNT + tetanus | 349 | 0 | 0 | 0 | 240 | 0 |
| Malaria | 25 | 6 | 0 | 0 | 0 | 0 |
| Cutaneous Leishmaniasis | 621 | 51 | 8 | 1 | 509 | 20 |
| Others | 520 | 5 | 2 | 0 | 400 | 6 |
| Total | 5628 | 534 | 25 | 1 | 2831 | 153 |

Figure-3: Number of alerts received and responded, week 41 to 44 2014

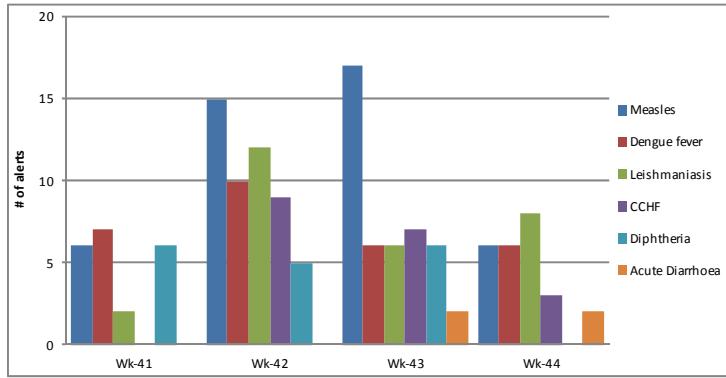
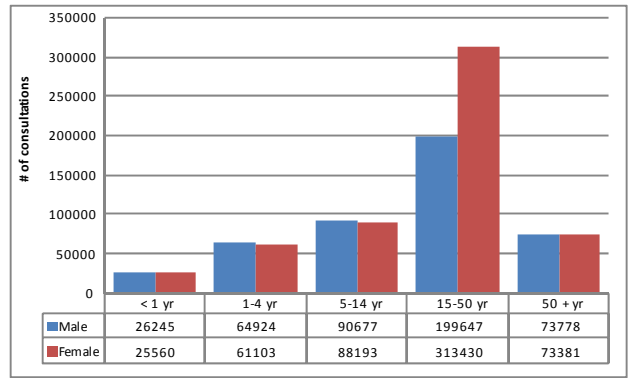
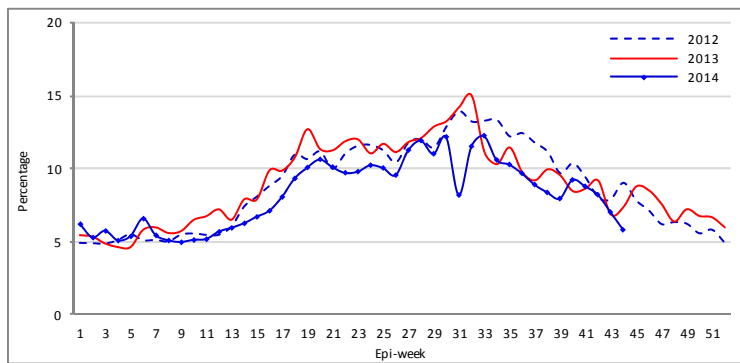


Figure-4: Number of consultations by age and gender, week 44, 2014



Province Khyber Pakhtunkhwa:

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



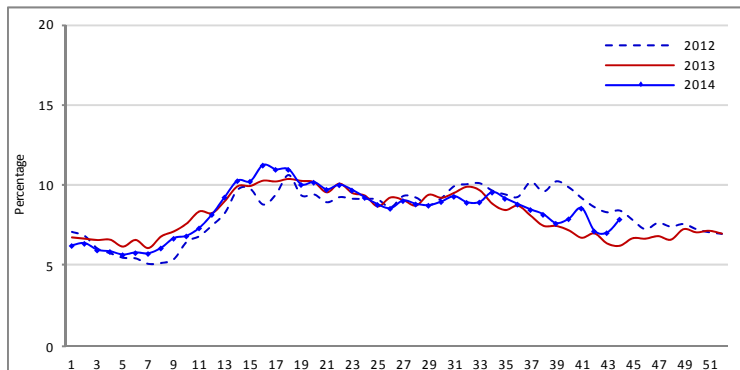
106 health facilities from 10 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 30,468 patients consultations reported in week 44, 2014.

A total of 2 alerts for Leishmaniasis were received and appropriate measures were taken during this week.

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



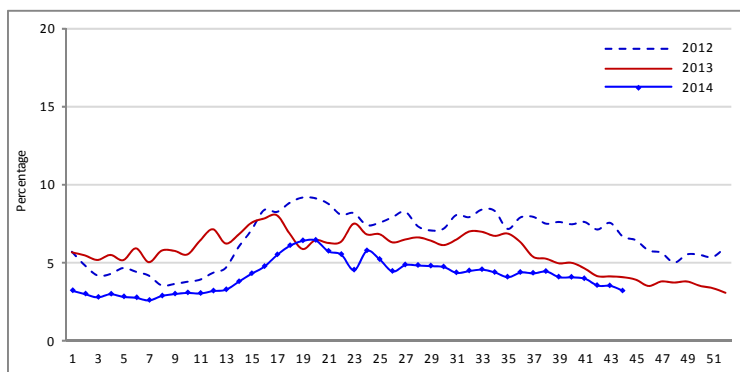
658 health facilities from 21 districts in Sindh province reported to DEWS with a total of 210,468 patient consultations in week 44, 2014.

A total of 4 alerts were received and appropriate measures were taken. Altogether 3 alerts were for Leishmaniasis; while 1 for Naegleria Meningitis.

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



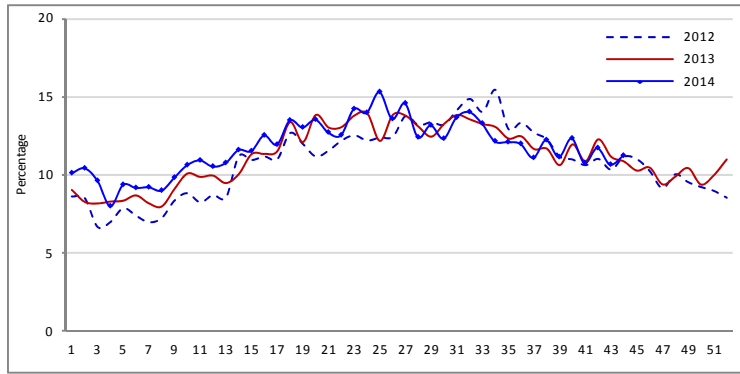
1,528 health facilities from 35 districts in Punjab province reported to DEWS with a total of 737,549 patients consultations in week 44, 2014.

Total 10 alerts were received and appropriate measures were taken. Altogether 6 alerts each were for Dengue fever; 2 for Acute diarrhoea; while 1 each for Typhoid fever and Scabies were responded in province Punjab.

The weekly trend of Acute diarrhoea in Punjab showing decrease 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



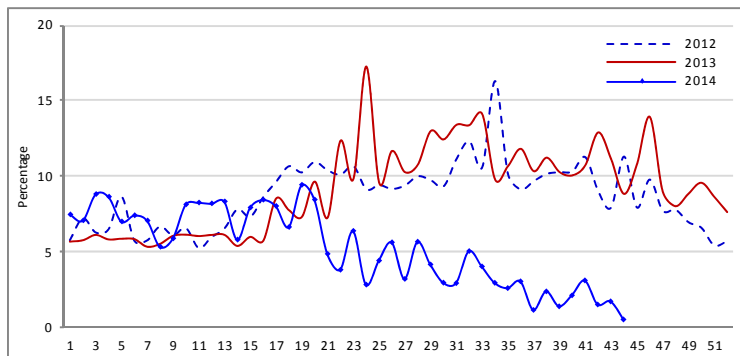
167 health facilities from 8 districts in Balochistan province reported to DEWS with a total of 28,132 patients consultations in week 44, 2014.

A total of 8 alerts were reported and appropriate measures were taken. Altogether 3 alerts each were for CCHF and Measles; while 2 for Leishmaniasis.

In this week the weekly proportion of AD showing increase as compared with last week and vigilant monitoring of the situation is required.

FATA:

Figure-9: Weekly trend of Acute diarrhoea, FATA



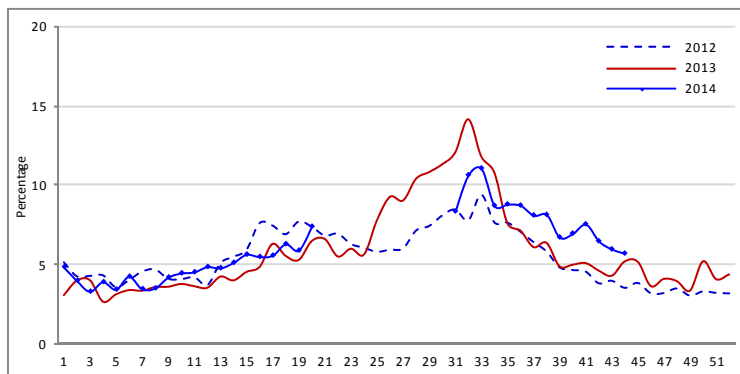
1 health facilities from 1 agency in FATA reported to DEWS with a total of 642 patients consultations in week 44, 2014.

No alert for any disease was received from any area in FATA in week 44 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



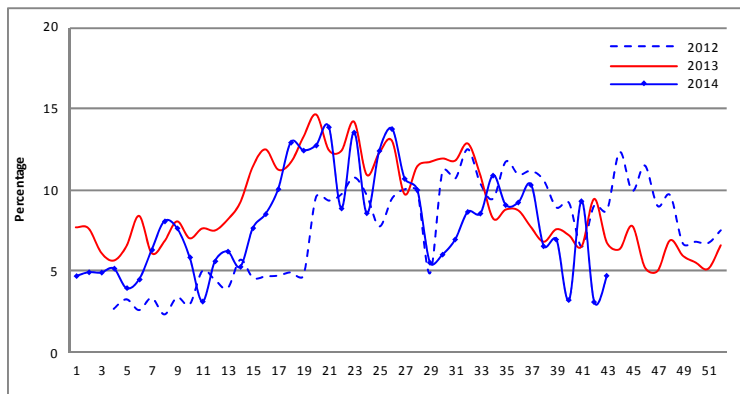
65 health facilities from 8 districts in AJK reported to DEWS with a total of 9,679 patients consultations in week 44, 2013.

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



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

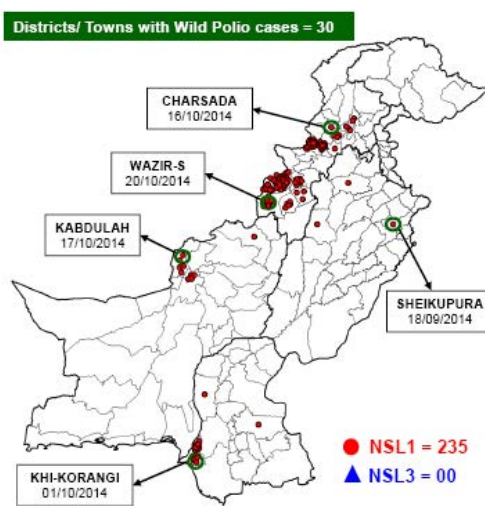
No alert for any disease was reported in week 43 from Islamabad in this week.

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 44 (26 Oct - 1 Nov 2014) fifteen new wild polio virus (WPV) cases were reported, eight from Federally Administered Tribal Areas (six from Khyber agency, one each from South Waziristan agency and FR Bannu), four from Khyber Pakhtunkhwa (three from Peshawar, one from Charsada districts), four from Sindh (two from Korangi town, one each from Gadap town and Dadu district) and three from Balochistan (two from Kila Abdullah, one from Quetta districts). This brings the total number of polio cases in 2014 to 235 (compared to 67 in 2013 till this time) from 30 districts/towns/tribal agencies/FR areas (compared to 19 in 2013 till this time).

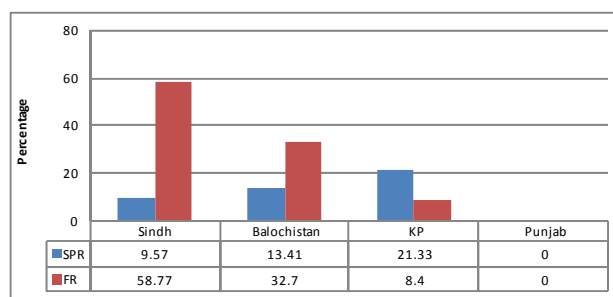
| Province | Year 2013 | | | Year 2014 (till 1 Nov) | | |
|--------------------|-----------|----------|----------|------------------------|----------|----------|
| | P1 | P3 | P1+P3 | P1 | P3 | P1+P3 |
| FATA | 65 | - | - | 151 | - | - |
| Khyber Pakhtunkhwa | 11 | - | - | 48 | - | - |
| Sindh | 10 | - | - | 23 | - | - |
| Balochistan | - | - | - | 10 | - | - |
| Punjab | 7 | - | - | 3 | - | - |
| Gilgit-Baltistan | - | - | - | - | - | - |
| AJ&K | - | - | - | - | - | - |
| Islamabad | - | - | - | - | - | - |
| Total | 93 | - | - | 235 | - | - |



Malaria:

The Table and chart given below shows the Malaria Slide Positivity and Falciparum Ratio in week 44, 2014. Total number of Malaria cases tested in this week is 3,948 out of which 489 were found positive; 303 for P. Vivax; 78 for P. Falciparum; while 108 for Mixed (SPR = 12.39%; F.R = 38.04%).

| Malaria tests \ Province | Sindh | Balochistan | Khyber Pakhtunkhwa | Punjab |
|--------------------------|-------|-------------|--------------------|--------|
| P. Vivax | 87 | 107 | 109 | 0 |
| P. Falciparum | 25 | 43 | 10 | 0 |
| Mixed | 99 | 9 | 0 | 0 |
| # tested | 2204 | 1186 | 558 | 0 |
| SPR | 9.57 | 13.41 | 21.33 | 0 |
| FR | 58.77 | 32.7 | 8.4 | 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.

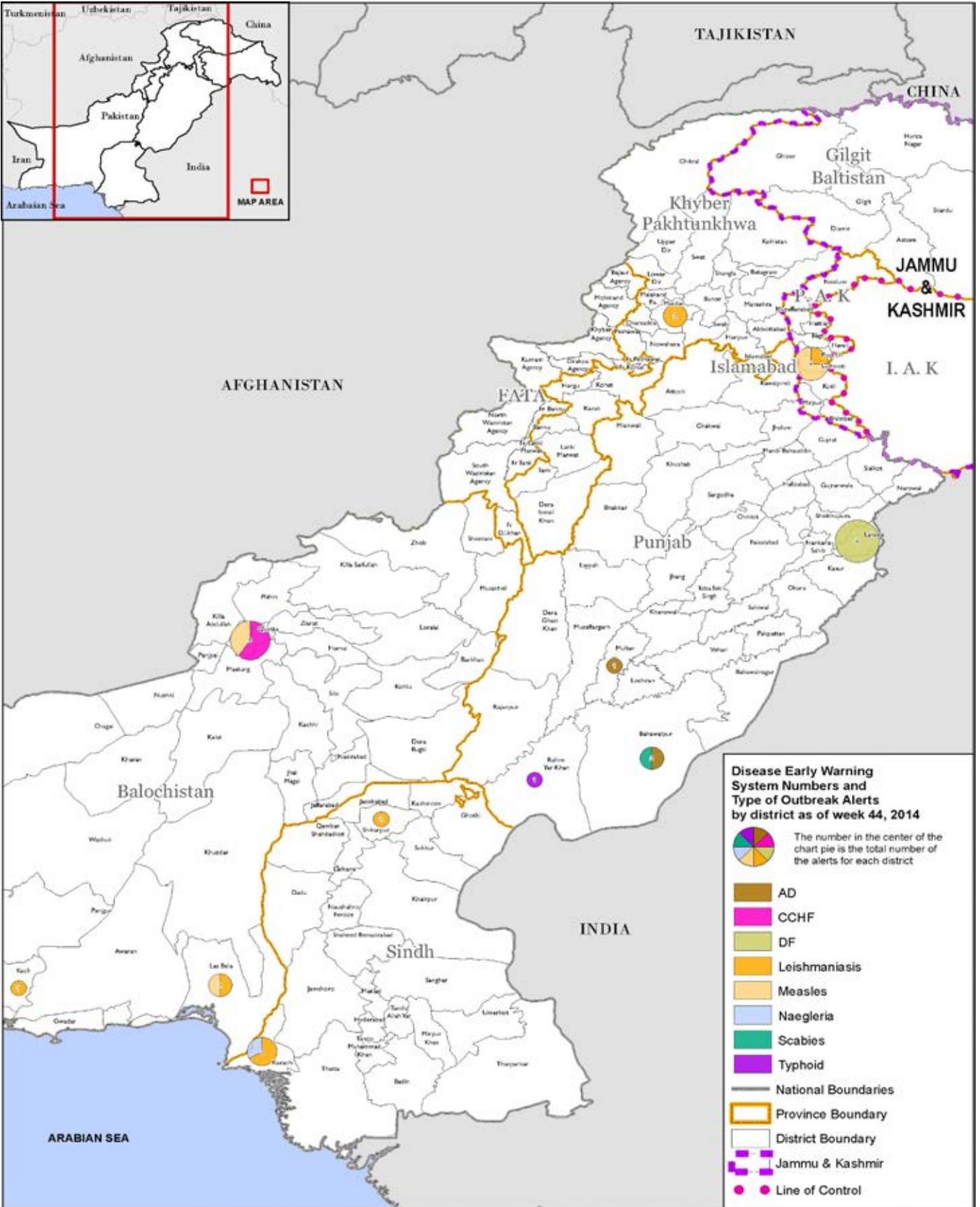
Crimean Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8, 2014. So far 138 suspected cases (66 laboratory confirmed) and 37 deaths (of these 20 laboratory confirmed) have been reported. Most of the cases are reported from Balochistan province, total 71 suspected 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 44 2014



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