

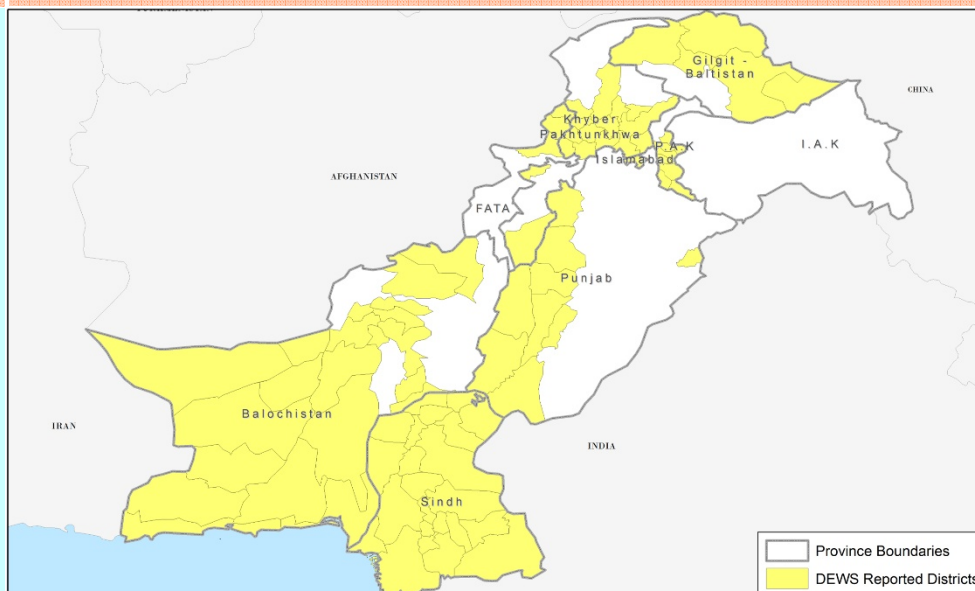


Highlights

*Epidemiological week no. 52
(23 to 29 Dec 2012)*

- **Measles:** 42 alerts investigated this week, responding to 11 outbreaks involving 135 measles cases and 6 deaths. Vitamin A was provided to cases and EDOs-H took action to improve vaccination in affected areas (Page 6)
- **86 districts** have reported to DEWS in week 52, 2012. **2,397** health facilities have shared weekly data to the Disease Early Warning System (DEWS) in this week
- **637,900** patients' consultations were reported in week 52 compared to **856,784** consultations reported in week 51, 2012.
- Altogether **59** alerts were investigated and response were provided to **11** outbreaks.

Figure-1: 86 districts reported to DEWS in week 52, 2012



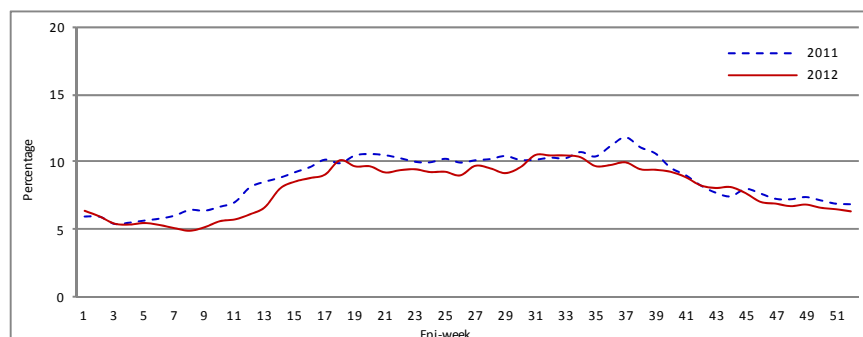
Priority diseases under surveillance in DEWS

Pneumonia
Acute Watery Diarrhoea
Bloody diarrhoea
Other 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 52, 2012 (1 Jan - 29 Dec 2012)

Disease	# of Cases	Percentage
Acute diarrhoea	3,201,561	8%
Bloody diarrhoea	174,775	0.5%
ARI	7,559,296	19%
S. Malaria	2,041,214	5%
Skin Diseases	1,750,121	5%
Unexplained fever	1,388,829	4%
Total (All consultations)	38,947,972	

Figure-2: Weekly trend of Acute diarrhoea in Pakistan; Week-1, 2011 to week-52, 2012.



Major health events reported during the Epi-week - 52 (23 - 29 Dec 2012)

Disease	# of Cases	Percentage
Acute diarrhoea	40,317	6%
Bloody diarrhoea	2,078	<1%
ARI	174,699	27%
S. Malaria	29,646	5%
Skin Diseases	22,812	4%
Unexplained fever	22,817	4%
Total (All consultations)	637,900	

- The graph (Figure-2) shows the comparison of weekly trend of Acute diarrhoea as proportional morbidity (percentage of cases out of total consultations) reported to DEWS each week in year 2011 and 2012.
- Overall weekly trend of acute diarrhoea is stable in all provinces.

Current week's (52/2012) Outbreaks:

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
23-Dec	Measles	Balochistan	Kech	Kuddan, UC Kuddan, Tehsil Dahst	1	2	3	4	Alert received from Private doctor. Investigation was done. 2 suspected cases were admitted with clinical presentation of measles. During field investigation 8 more cases found. None of the case was immunized. Treatment was provided along with health sensitization. In house to house survey found 44 children of under five years age and 5 of them were vaccinated. Measles campaign has started in the district so non immunized children will get immunized.
24-Dec	Measles	Balochistan	Khuzdar	Village Khia zai, UC Feroz Abad, Tehsil Khuzdar	1	1	2	1	5 cases reported from community, on investigation found the cases with typical sign & symptoms of Measles. Vit A was administrated. All the cases were advised for symptomatic treatment. BCG scar was seen on 3 children. Health and hygiene education was imparted. No more cases detected during house to house survey. Measles team was directed by EPI to vaccinate the area on priority bases during Measles campaign.
25-Dec	Measles	Balochistan	Ziarat	Kan banglow, UC kach, Tehsil Ziarat	3	0	2	0	5 cases reported from HF. Investigation was done at BHU. The cases came to HF for treatment. Cases had fever and rash when brought to HF. There was no immunization history. Vit-A plus health education given. Health education was given to HCP. Further treatment was advised. Follow up was planned this week. Matter was discussed with DDHO and EPI in charge.
24-Dec	Measles	Khyber Pakhtunkhwa	Abbottabad	Darwaza, Ayubia	2	2	3	3	EDO H informed SO to investigate a death reported from the village and few cases of Measles. On active surveillance with local health staff and found 9 suspected Measles cases and 1 death. Vitamin A and supportive medicines given. Mass vaccination against Measles done and vaccinated 65 children under 5 years of age. Health education given to the villagers.
26-Dec	Measles	Khyber Pakhtunkhwa	Swabi	Private Clinic Swabi	4	0	3	1	Suspected cases of Measles were reported from Private Clinic Swabi. Case was investigated and responded in the presence of Health department personal. During investigation 7 more cases were found in the same locality. EPI Card not available with all these kids. proper information regarding routine is not available. Vit.A given, health education sessions conducted, EDO H and EPI coordinator Informed, EPI Tech of the relevant UC was also present and briefed by WHO EHA for Mop up campaign.
24-Dec	Measles	Sindh	Dadu	Gulshan-e-Zeid colony, city Dadu	2	0	3	0	Suspected case was reported by Pediatrician of city Dadu. Case has history of high grade fever, Cough and conjunctivitis. During field investigation 4 other cases were found. Cases were not vaccinated. Vitamin (A) dose was given. Health education imparted. Vaccination status of 14 children were assessed. BCG=8(57%), Penta-1=7(50%), Penta-2=5(35%), Penta-3=3(21%), Measles-1=6(42%), Measles-2=4(28%). Information shared with DHO office and 1 Blood sample collected.
24-Dec	Measles	Sindh	Dadu	Jamali Muhalla, city Dadu	1	0	4	1	Suspected case was reported by Pediatrician of city Dadu. Case has history of high grade fever, Cough and conjunctivitis. During field investigation 5 other cases were found. Cases were not vaccinated. Vitamin (A) dose was given. Health education imparted. Vaccination status of 17 children were assessed. BCG=11(64%), Penta-1=9(52%), Penta-2=7(41%), Penta-3=4(23%), Measles-1=9(52%), Measles-2=5(29%). Information shared with DHO office.
24-Dec	Measles	Sindh	Jamshoro	Baloch goath, UC AB Shoro	2	0	3	0	Suspected 2 cases of Measles were reported from THQ Kotri. Case has complete sign and symptoms of Measles. Both cases were unvaccinated. During active surveillance 3 more cases were found. Vitamin (A) doses were given to all cases. Health education imparted regarding importance of vaccination. Vaccination status of 8 children were assessed. BCG=7(87%), Penta-1=6(75%), Penta-2=5(66%), Penta-3=4(50%), Measles-1=4(50%). Information shared with EDOH and 4 Blood samples were completed.
24-Dec	Measles	Sindh	Sukkur	Jamali Muhalla Adam Shah colony Uc Adam Shah	3	1	2	0	Suspected measles alert was reported by community alert was responded and field investigation was conducted total 6 cases including 1 death was investigated all were line listed blood sample taken and vitamin A provided to all. All information was shared with DHMT and advised for mop up activity regarding routine immunization.
24-Dec	Measles	Sindh	Sukkur	Rice Canal, Air port road bypass. UC Bachal Shah Miyani	6	0	2	0	Suspected measles alert was reported by community. Case was responded and field investigation was conducted where total 7 cases and 1 Death due to Measles was found. All cases were line listed. Two Blood sample collected and send to NIH. Vitamin A provided to all cases. All information was shared with DHMT and advised for mop up activity regarding routine immunization.
24-Dec	Measles	Sindh	Sukkur	Tando Thatti near Bus terminal UC Long Bhatti	7	2	4	2	Suspected measles alert was reported by community alert was responded and field investigation was conducted total 15 cases were investigated all were line listed blood sample taken and vitamin A provided to all. All information was shared with DHMT and advised for mop up activity regarding routine immunization.

Figure-3: Number of alerts received and responded, week 49 - 52, 2012

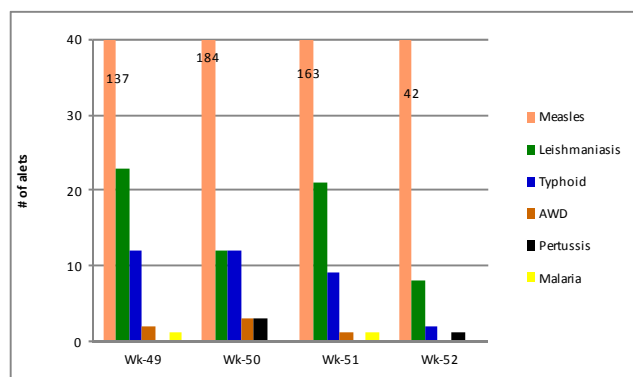
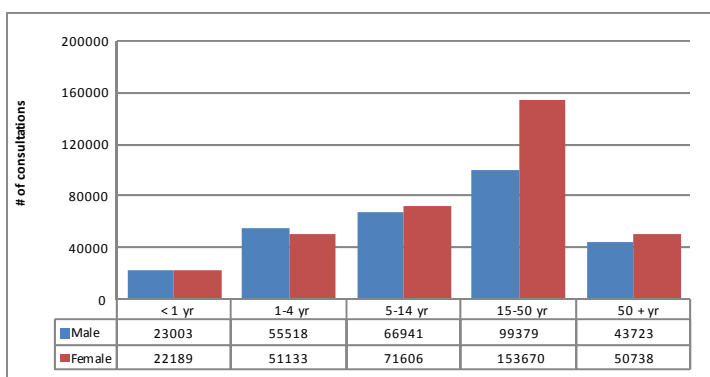


Figure-4: Number of consultations by age and gender, week 52, 2012



Province Khyber Pakhtunkhwa:

471 health facilities from 16 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 113,239 patients consultations reported in week 52, 2012. Total 11 alerts were received and appropriate measures were taken. Altogether 10 alerts for Measles; while 1 for ARI. Acute diarrhoea trend showing decrease as compare with last week.

Figure-5: Trend of acute diarrhoea diseases, province Khyber Pakhtunkhwa

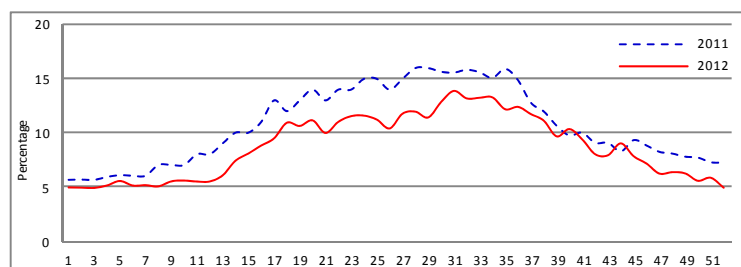
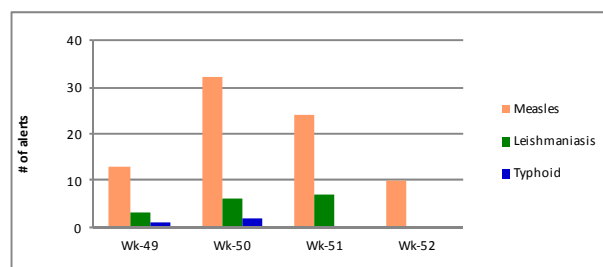


Figure-6: Number of alerts received and responded week 49 - 52, 2012, province KPK



Province Sindh:

916 health facilities from 23 districts in Sindh province reported to DEWS with a total of 264,962 patients consultations in week 52, 2012. Total 21 alerts received while 6 outbreaks were identified and appropriate measures were taken. Altogether 18 alerts for Measles; 2 for NNT; while 1 for Pertussis. Acute Diarrhoea shows stability from last few weeks.

Figure-7: Trend of trend of acute diarrhoea, province Sindh

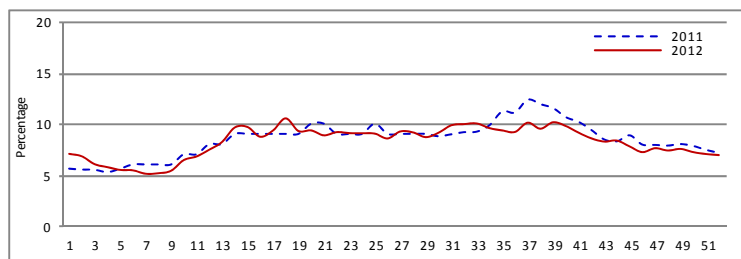
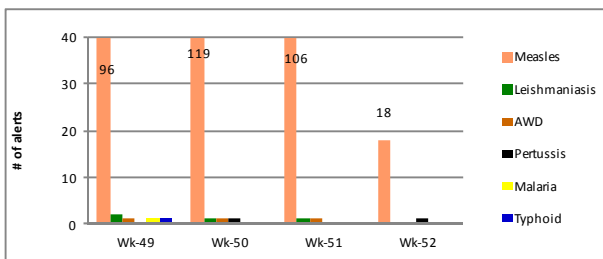


Figure-8: Number of alerts received and responded week 49 - 52, 2012, province Sindh



Province Punjab:

431 health facilities from 9 districts in province Punjab reported to DEWS with a total of 164,078 patients consultations in week 52, 2012. Total 13 alerts were received and appropriate measures were taken. Altogether 8 for Measles; 2 each for Typhoid and ARI; while 1 for Bloody diarrhoea. AD shows a minor increase as compare with last week.

Figure-9: Trend of acute diarrhoea, province Punjab

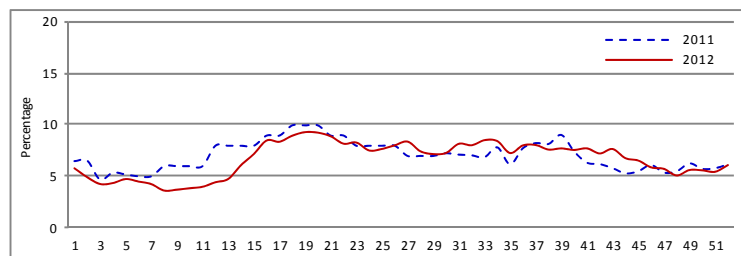
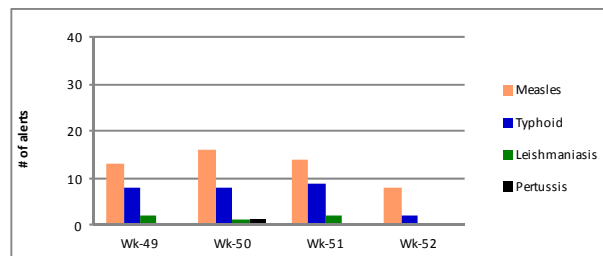


Figure-10: Number of alerts received and responded week 49 - 52, 2012, province Punjab



Province Balochistan:

393 health facilities from 21 districts in province Balochistan reported to DEWS with a total of 51,626 patients consultations in week 52, 2012. Total 13 alerts reported and appropriate measures were taken in week 52, 2012. Altogether 8 alerts were for Leishmaniasis; and 5 Measles. AD showing decrease from last few weeks.

Figure-11: Trend of acute diarrhoea, province Balochistan

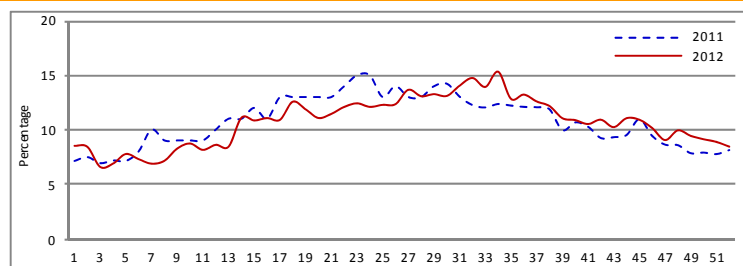
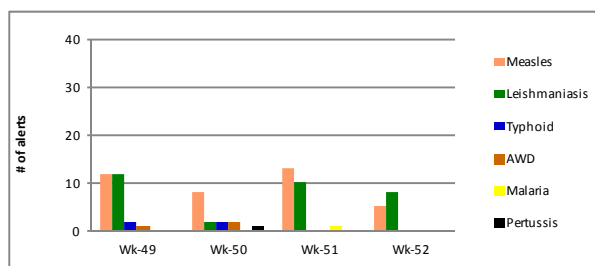


Figure-12: Number of alerts received and responded week 49 - 52, 2012, Balochistan

**Province Gilgit Baltistan:**

31 health facilities from 5 districts in Gilgit Baltistan reported to DEWS with a total of 10,934 patients consultations in week 52, 2012. No alerts for any disease was reported in week 52, 2012. AD showing decrease as compared with last week.

Figure-13: Trend of acute diarrhoea, province Gilgit Baltistan

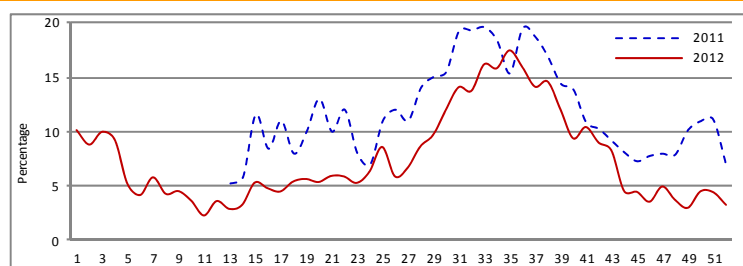
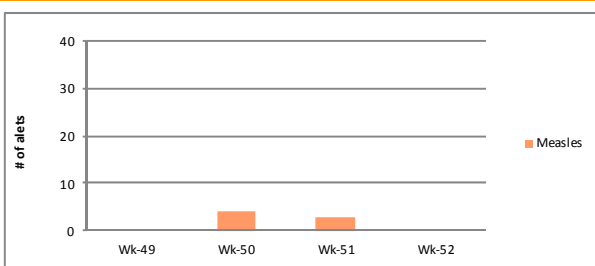


Figure-14: Number of alerts received and responded week 49 - 52, 2012, Gilgit Baltistan

**FATA:**

44 health facilities from 3 agencies in FATA reported to DEWS with a total of 12,413 patients consultations in week 52, 2012. 1 alert for Measles was reported in week 52, 2012 and appropriate measures were taken. AD showing a minor increase as compare with last week.

Figure-15: Trend of acute diarrhoea, FATA

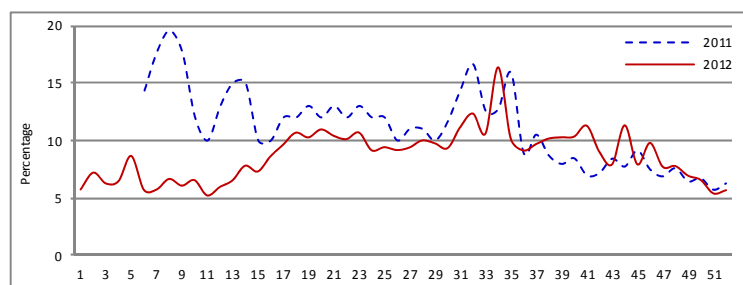
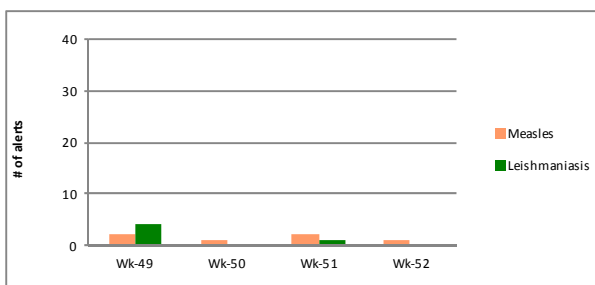


Figure-16: Number of alerts received and responded week 49 - 52, 2012, FATA

**State of Azad Jammu and Kashmir:**

94 health facilities from 8 districts in AJ&K reported to DEWS with a total of 15,966 patients consultations in week 52, 2012. No alerts for any disease was reported in week 52, 2012. AD showing stability during last few weeks.

Figure-17: Trend of acute diarrhoea, AJ&K

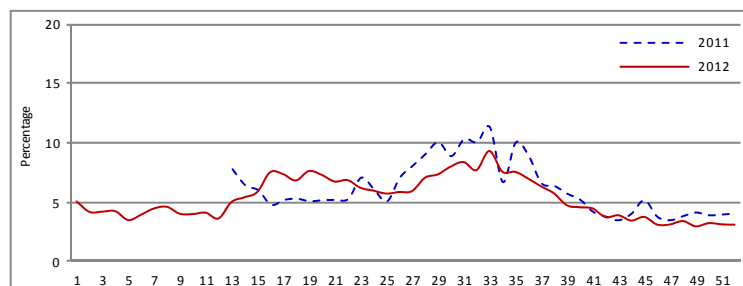


Figure-18: Number of alerts received and responded week 49 - 52, 2012, AJ&K

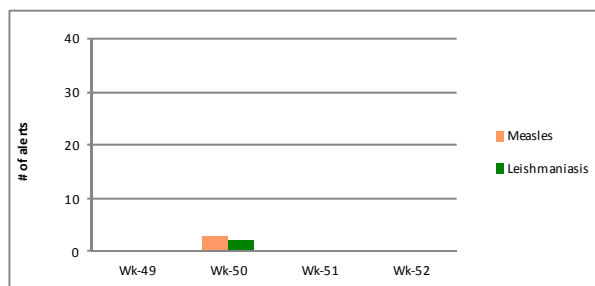


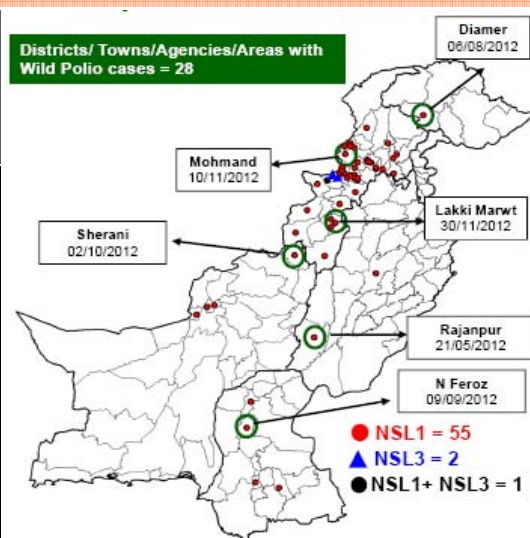
Table-1: Number of alerts and outbreaks reported and investigated with appropriate response

Disease	2011		2012 (up till week 51)		Current week 52, 2012		Total for 2012 (week 1-52, 2012)	
	A	O	A	O	A	O	A	O
Acute watery diarrhoea	1351	538	635	171	0	0	635	171
Acute jaundice syndrome	51	17	113	22	0	0	113	22
Bloody diarrhoea	97	19	145	11	1	0	146	11
CCHF	17	3	68	41	0	0	68	41
Dengue fever	785	111	175	29	0	0	175	29
Diphtheria	40	19	60	16	0	0	60	16
Measles	1708	110	5814	777	42	11	5856	788
Pertussis	286	81	365	147	1	0	366	147
NNT + tetanus	398	0	558	0	2	0	560	0
Malaria	132	88	136	68	0	0	136	68
Leishmaniasis	298	33	890	78	8	0	898	78
Others	587	63	1519	58	5	0	1524	58
Total	5750	1082	10478	1418	59	11	10537	1429

Distribution of Wild Polio Virus cases Pakistan 2011 and 2012

- As of 5 January 2013, Pakistan has reported a total of 58 polio cases including 55 type-1; 2 type-3; and 1 mixture type-1 and 3 polio cases from 28 districts/tribal agencies.

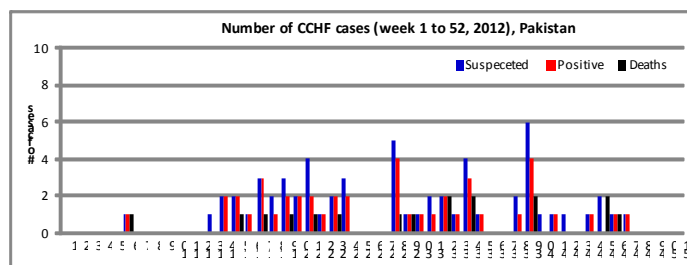
Province	Cases 2011		Cases 2012		
	P1	P3	P1	P3	P1+P3
Punjab	9	-	2	-	-
Sindh	33	-	4	-	-
Khyber Pakhtunkhwa	23	-	27	-	-
FATA	57	2	17	2	1
Balochistan	73	-	4	-	-
AJ&K	-	-	-	-	-
Gilgit-Baltistan	1	-	1	-	-
Islamabad	-	-	-	-	-
Total	196	2	55	2	1



Follow up of CCHF

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.



In week 52, 2012, no new CCHF case was reported from Balochistan. In 2012, So far a total of 61 suspected cases have been reported throughout the country with 42 confirmed to date and 17 deaths; (CFR is 40.48%). 24 confirmed cases have been reported from Balochistan; 7 from Sindh; 6 from Khyber Pakhtunkhwa and 5 from Punjab. Chart at right illustrates current situation of CCHF cases in 2012.

Approximately all the cases have contact history with animal trading/handling, tick bite, contact with patient, tannery worker, butcher/animals slaughtering, a traditional practice of wearing fresh animal skin (posti) to treatment ailment. These animals and their skins have continuous movement Intra Pakistan and between neighboring countries (Afghanistan and Iran).

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.

Focus on: Brief on Measles situation in Pakistan - 2012

Data for the suspected measles cases in the Pakistan are reported by health facilities to Disease Early Warning & Response System using a standard case definition. "Any person with fever and maculopapular rash and one of the following: cough, coryza or conjunctivitis or any person in whom a clinician suspects measles infection" A measles case is considered confirmed if it is laboratory-confirmed and is linked epidemiologically to a confirmed case.

The Disease Early Warning and Response System (DEWS) teams (WHO and DOH) conduct field investigation for each alert, collect Samples for laboratory confirmation and initiate appropriate response in the field. Since 1st January 2012, total 5,856 measles alerts have been reported from all provinces, where 788 alerts have been confirmed as localized outbreaks (indicating that there was a cluster of 5 or more clinical cases in a single location over a 30 day time period with at least one lab confirmed case). During field investigations and response, 14,823 suspected cases of measles were investigated and responded. Total 6,589 blood samples were collected and sent to NIH for lab confirmation between January and June 2012. Of these samples, 68.5% (4,516) were found positive for measles and 5.7% (151) were Rubella positive. Since January 2012, total deaths attributed to the suspected measles in Pakistan are 310 (CFR 2%) where most of the affected children died due to post measles complications such as pneumonia, post measles encephalitis and diarrhea.

Table 1: Distribution of measles cases by months in all provinces of Pakistan in 2012

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
AJK	0	3	5	12	69	43	32	41	19	18	12	11	265
Balochistan	70	120	109	217	274	341	242	63	64	53	118	139	1810
FATA	7	28	41	87	68	77	63	47	38	32	64	7	559
Gilgit-Baltistan	3	0	0	3	6	4	2	3	1	1	11	16	50
ICT	0	1	3	11	15	11	5	4	5	0	4	4	63
KP	198	303	384	394	499	439	314	270	207	208	177	146	3539
Punjab	18	50	95	150	212	224	183	118	52	45	89	82	1318
Sindh	107	162	304	553	656	653	503	542	256	620	1039	1957	7352
Total	403	667	941	1427	1799	1792	1344	1088	642	977	1514	2362	14956

Table 2: Distribution of measles deaths by months in all provinces of Pakistan in 2012

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
AJK	0	0	0	0	0	0	0	0	0	0	0	0	0
Balochistan	0	2	0	0	5	2	5	1	3	3	5	4	30
FATA	0	0	0	4	0	1	4	3	1	0	0	0	13
Gilgit-Baltistan	0	0	0	0	0	0	0	0	0	0	0	0	0
ICT	0	0	0	0	0	0	0	0	0	0	0	0	0
KP	2	4	5	2	5	11	1	2	1	1	1	3	38
Punjab	0	0	0	5	1	8	0	1	0	0	0	1	16
Sindh	1	2	6	9	13	14	5	11	3	14	42	93	213
Total	3	8	11	20	24	36	15	18	8	18	48	101	310

Alerts and outbreaks, week 52, 2012

