



## DISEASES EARLY WARNING SYSTEM

December 12, 2010 **WEEKLY MORBIDITY & MORTALITY REPORT** 4<sup>TH</sup> YEAR ISSUE-49

### Epid Week 49 (4<sup>th</sup> -10<sup>th</sup> December 2010) **HIGHLIGHTS**

- Out of 236 functional Sentinel sites(SS), 234 have sent their reports in Week-49 of 2010;
- Out of total 207,664 events recorded in week-49 of 2010, 59,583(28.7%) consultations were reported due to DEWS target diseases.
- Main causes of consultations this week are ARI (22.1%) and ADD (5.5%) from total clients in a continuing trend from the week before.
- 44 death cases caused due to Pneumonia, Meningitis/SIC and Diarrheal diseases, so that 31 cases due to pneumonia/ARI, 5 death cases due to diarrheal diseases and 8 deaths cases reported due to Meningitis and Severely Ill Children.

### Reported/Investigated Outbreaks in this Week:

Sus. Disease Outbreaks (OB)	District/province in which OB took place in this week
Pertussis Outbreak	In Ahmadabad district of Paktya province.
Measles Follow up	In Andar village of Shahwalikot district of Kandahar province.

### Reports received from reporting Sites:

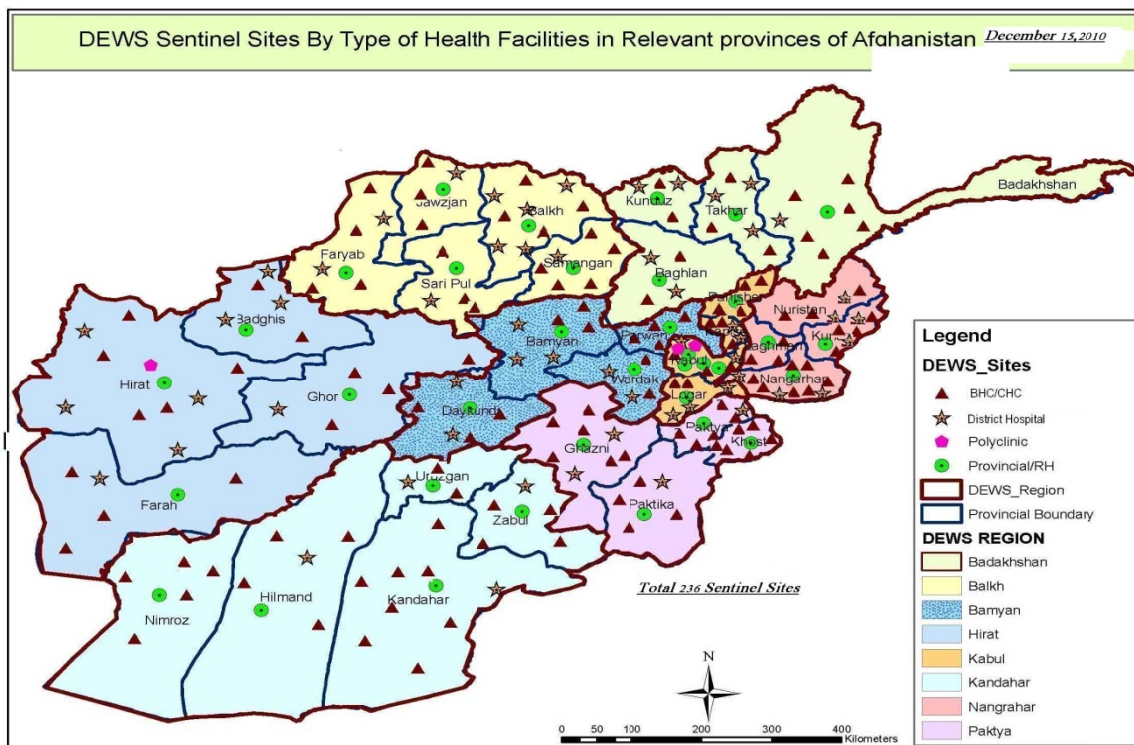
As of December 9, 2010, 236 sentinel sites were functioning in eight epidemiological regions, in 34 provinces of Afghanistan. In the reporting week, 234 sentinel sites have sent their reports on new cases of DEWS target diseases that were recorded during the reporting period (Week-49 or 4<sup>th</sup> – 10<sup>th</sup> December 2010). Out of all events recorded in DEWS sentinel sites, 15 target diseases (priority diseases) are included in weekly reports. The status of reports in the reporting week has been indicated in the table below:

**Table-1: Status of Reports Received from DEWS Regions During Epidemiological week-49, 2010**

	Kabul	Bamyan	Balkh	Badakhshan	Herat	Kandahar	Nangarhar	Paktia	Total
No. of Expected Reports from Sentinel Sites	42	22	32	25	28	31	27	29	236
No. of Reports Received in this week	42	22	32	24	28	31	26	29	234(99%)

### DEWS Sentinel Sites:

The Epidemiological map indicates the DEWS sentinel sites, already established in the relevant regions/provinces till December 10, 2010 by type of health facilities, from which data on 15 DEWS target diseases are being collected. The symbols on the map showing the number of sentinel sites in each region/province and not the GPS of the SS locations.

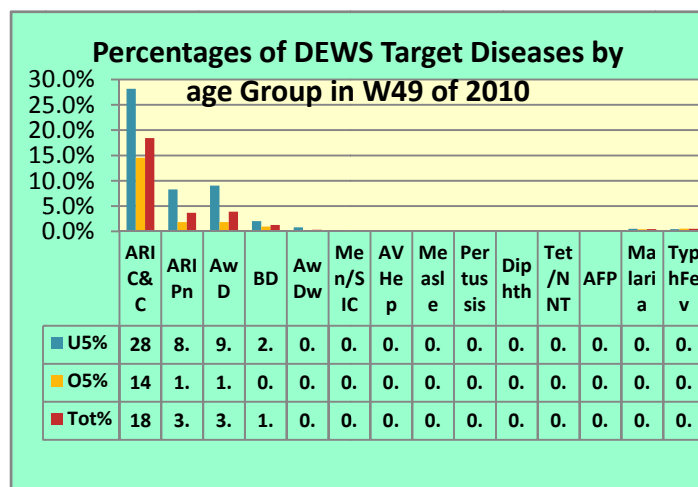


DEWS Data at a Glance W49:			
Dis/Cases	<5	5+	Tot
C&C	16707	21576	38283
Pneumonia	4920	2721	7641
Pn(Deaths)	29	2	31
DEWS Diseases	29356	30227	59583
Tot Clients	59294	148370	207664

Table-2: DEWS Epidemiological Regions and types of Sentinel Sites in Week 49 of 2010									
Type of SS	Kabul	Bamyan	Balkh	Badakh	Herat	Kandahar	Nangrahar	Paktia	Total
CHC/BHC	15	11	18	14	14	22	17	21	122
DH	12	7	9	7	9	4	7	4	59
PH/RH/SH	13	4	5	4	4	5	3	4	42
Poly Clinic	2	0	0	0	1	0	0	0	3
<b>Total</b>	<b>42</b>	<b>22</b>	<b>32</b>	<b>25</b>	<b>28</b>	<b>31</b>	<b>27</b>	<b>29</b>	<b>236</b>

### DEWS Data in Epidemiological Week N<sup>o</sup>.49 of 2010

Out of total, 207,664 clients recorded in week-49 of 2010, 18.4% (38283) of consultations were reported due to cough and cold and 3.7% (7641) of consultations was reported due to pneumonia. In the same week, 5.5% or 11,345 events were reported due to diarrheal illnesses (3.9% due to Acute Watery Diarrhea, 1.3% due to Bloody Diarrhea and 0.3% due to acute watery diarrhea with dehydration). In comparison with previous week (W48 of 2010, the percentage of ARI diseases has increased by 1.7% to 22.1%, the percentage of Acute Diarrheal diseases decreased by 0.3% to 5.5%. This is due to decrease of temperature and slight change in weather during the reporting week. The chart above shows the percentages of DEWS diseases by age group in week-49 of 2010.



### Percentage of ARI Diseases by weeks and by Age Groups

In the epidemiological week-49 (4<sup>th</sup> -10<sup>th</sup> December 2010), a total of 45924 events of ARI were reported. 26.2% of total clients less than 5 years of age was cough & Cold patients and 14.5% among the age group 5 years and over. The percentage of

**Table-3: Percentages of ARI Diseases during 11 recent weeks by age groups and by weeks**

Disease	Age	Week 39-10 (%)	Week 40-10 (%)	Week 41-10 (%)	Week 42-10 (%)	Week 43-10 (%)	Week 44-10 (%)	Week 45-10 (%)	Week 46-10 (%)	Week 47-10 (%)	Week 48-10 (%)	Week 49-10 (%)
ARI- C&C	<5 Yr.	21.0	21.0	21.4	21.7	22.5	23.5	25	24.0	25.7	26.6	28.2
	5+	9.8	10.2	10.9	10.8	11.2	11.9	11.9	11.6	13.7	13.6	14.5
ARI-Pneumonia	<5 Yr.	5.7	5.9	5.7	5.8	6.0	6.6	6.8	7.8	8.1	7.9	8.3
	>=5 Yr	0.9	0.9	0.9	0.9	1.2	1.2	1.2	1.4	1.5	1.3	1.8

C&C (<5 years) consultations in week-39 of 2010 in comparison with the percentage of C&C in week-49 of 2010, increased by 8.2%, whereas in case of 5 years and above increased by 4.7% in last 11 weeks. The trend of ARI diseases in last 11 weeks can be read in table-3. The percentages of consultations on Pneumonia cases of age group less than 5 years increased by 2.6% in last 11 weeks, whereas the percentage of age group 5 years and over increased by 0.9% to 1.8% in last 11 weeks. In the reporting week 48, the highest percentage of ARI-C&C has been recorded in Paktia and Laghman provinces with 28% each, whereas the lowest percentages of ARI-C&C were reported from Ghor province with 7%. The highest percentages of pneumonia reported from Jawzjan provinces with 12%.

### Percentage of Diarrheal Diseases by weeks and by Age Groups

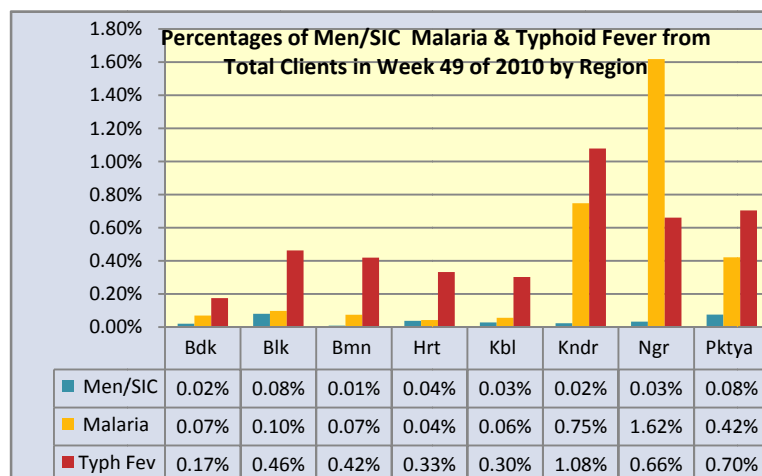
The table-4 below shows the percentages of diarrheal diseases (Acute watery Diarrhea, Bloody Diarrhea and Acute watery diarrhea with dehydration) from week-39 of 2010 to week-49 of 2010 from the total clients. Acute watery diarrhea among children less than five years, decreased from 17.2% in week-39 of 2010 to 9.0% in week-49 of 2010, whereas acute watery diarrhea among age group 5 years and above decreased from 3.6% in week-39 of 2010 to 1.8% in week-49 of 2010 (Please refer to Table #4, below). Bloody diarrhea, in age group less than 5 years decreased from 2.8% in week-39 of 2010 to 2.0% in week-49 of 2010, whereas in case of age group 5 years and above decreased by 0.3% in the same period. Acute watery diarrhea with dehydration among age group less than five years decreased by 0.5% and in case of age group 5 years and over decreased by 0.1% in last eleven weeks.

**Table-4: Percentages of Diarrheal Diseases from Total Clients during 11 recent weeks by age groups.**

Disease	Age	Week 39-10 (%)	Week 40-10 (%)	Week 41-10 (%)	Week 42-10 (%)	Week 43-10 (%)	Week 44-10 (%)	Week 45-10 (%)	Week 46-10 (%)	Week 47-10 (%)	Week 48-10 (%)	Week 49-10 (%)
Acute Watery Diarrhea	<5 Years	17.2	16.0	14.8	14.9	13.2	12.6	12.2	11.2	10.4	9.8	9.0
	>= 5 Years	3.6	3.4	3.5	3.5	2.8	2.6	2.6	2.7	2.3	1.9	1.8
Bloody Diarrhea	<5 Years	2.8	2.7	2.6	2.5	2.4	2.9	2.4	2.2	2.2	2.2	2.0
	>=5 Years	1.3	1.2	1.3	1.2	1.1	1.4	1.1	1.3	1.1	1.0	0.9
Acute W. Diarrhea with Dehydration	<5 Years	1.3	1.5	1.6	1.5	1.2	1.3	1.2	1.2	0.8	1.0	0.8
	>= 5 Years	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1

### Percentages of suspected Meningitis/SIC, Malaria and Typhoid Fever by Region in week-49 of 2010

In the epidemiologic week-49(EW-49) of 2010, a total of 80 suspected cases of Meningitis/Sever Ill Child were reported from all regions and the highest percentages were recorded in Balkh region with around 0.1%. In this reporting week, in national level 934 consultations were reported by Sentinel Sites to be malaria and the highest percentage of Malaria cases were reported from Nangarhar region with 1.6% and followed by Kandahar region with 0.7%. Out of the total clients, 1067 cases or 0.5% in national level were reported to be Typhoid Fever and the highest percentage of Typhoid Fever were reported from Kandahar region with 1.1% and followed by Paktia region with 0.7% from total clients.

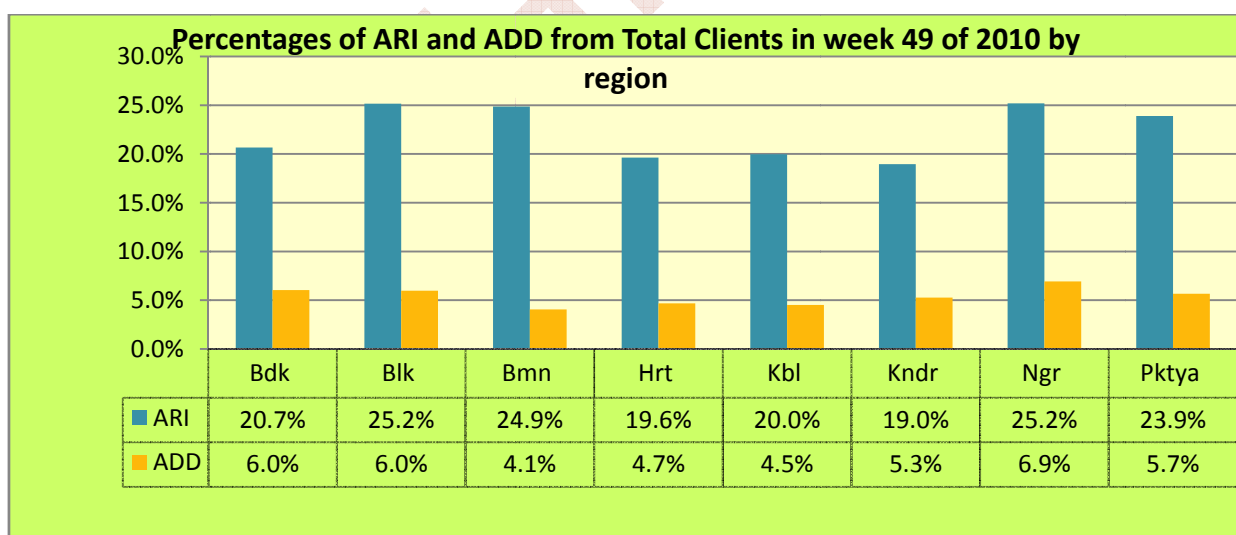
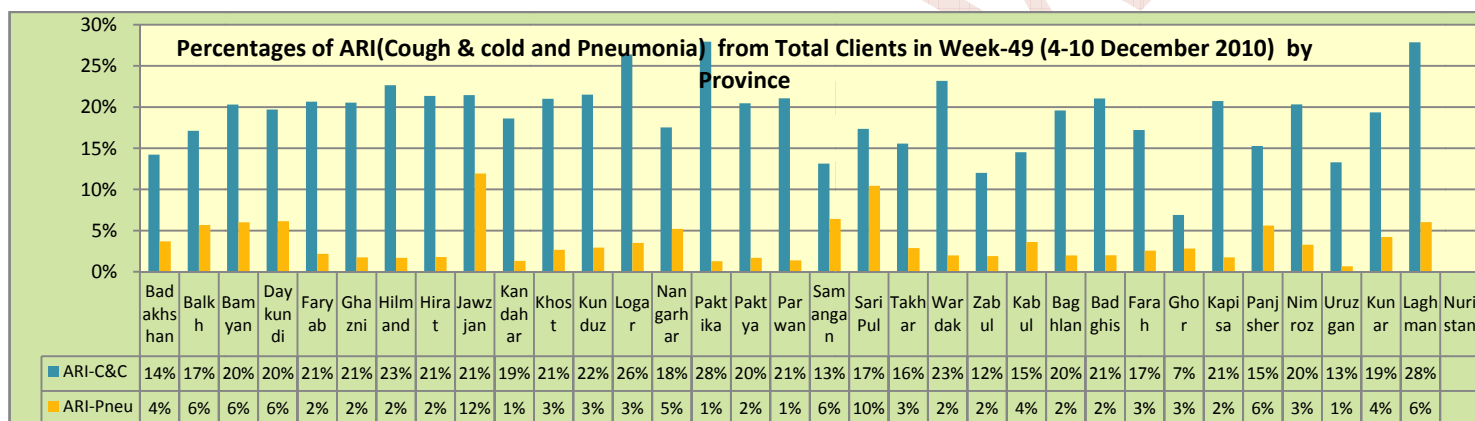


**Table-5: Suspected Cases of Vaccine Preventable Diseases in W49 of 2010 by Region**

	Men (SIC)	AV H	Meas	Pert	Diphth	Teta/NNT	AFP
Bdk Reg	4	12	3	0	0	0	1
Blk Reg	23	3	0	0	1	0	0
Bmn Reg	1	6	1	0	0	0	0
Hrt Reg	8	2	0	0	0	1	1
Kbl Reg	13	78	13	0	0	0	0
Kndr Reg	6	3	15	0	0	0	1
Ngr Reg	12	59	0	0	0	3	1
Pktya Reg	13	27	0	1	0	0	0
<b>Total</b>	<b>80</b>	<b>190</b>	<b>32</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>4</b>

**Table-6: Death Cases by Main Causes of Mortality and by Region in W49 of 2010**

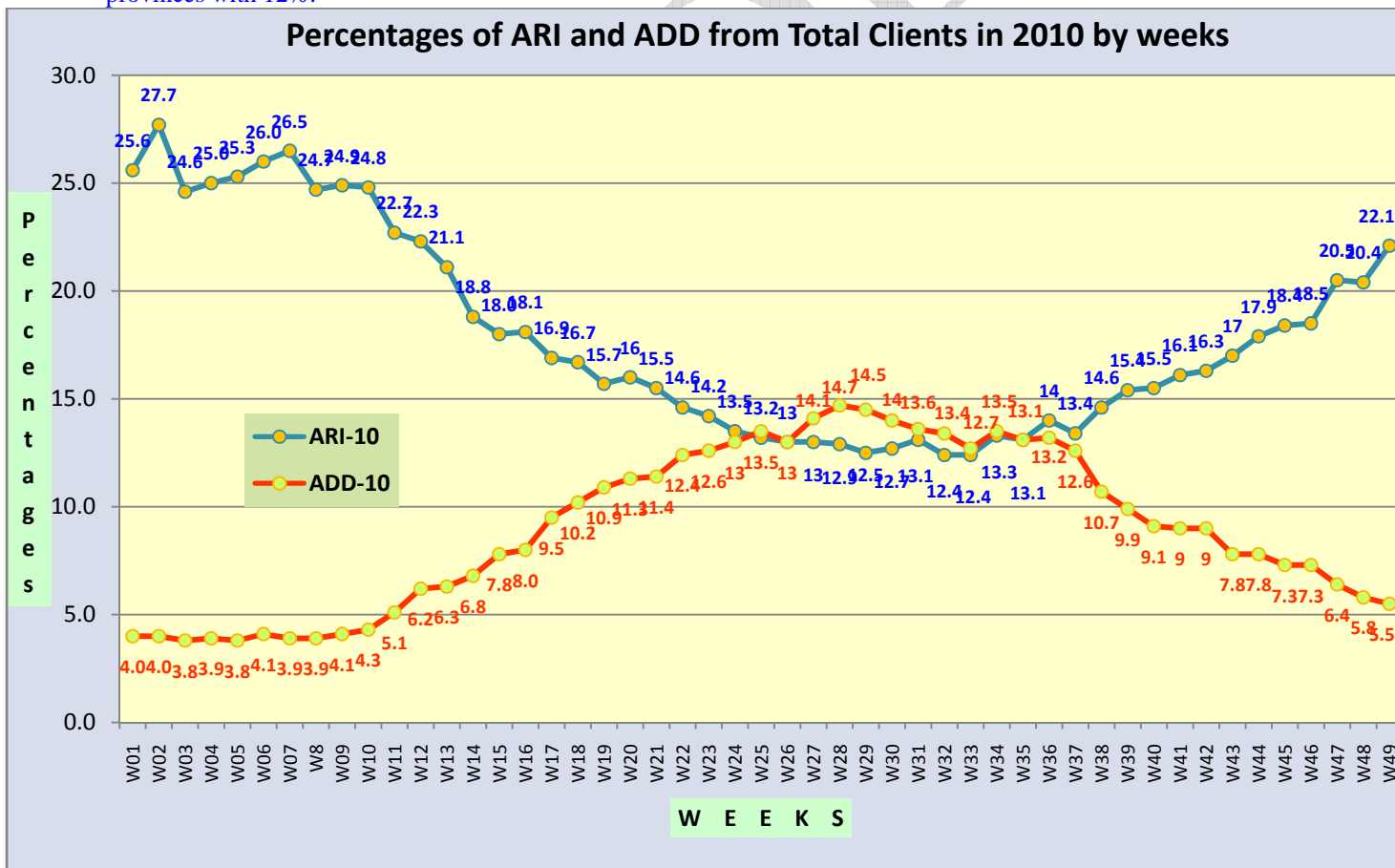
	Pn	ADD	Men/SIC
Bdk	7	1	0
Blk	4	0	5
Bmn	2	0	0
Hrt	0	0	2
Kbl	8	4	0
Kndr	1	0	1
NGR	6	0	0
Pktya	3	0	0
<b>Total</b>	<b>31</b>	<b>5</b>	<b>8</b>



Percentages of ARI & Diarrheal Diseases by Epidemiological Weeks (from W01 to W49 of 2010)

Among the DEWS target diseases, Acute Respiratory Infections (ARI) and Acute Diarrheal Diseases (ADD) as leading causes of morbidity and mortality, having the highest frequency of consultations. The following Line-Chart shows the trend of ADD and ARI from the beginning of 2010 to date; By the beginning of the year 2010 the percentages of ARI (Acute Respiratory Infections) cases from total clients were very high(over 27%), whereas the percentages of ADD (Acute Diarrheal Diseases) from total clients reached very close to its minimum point (around 4%), so that the percentages of ARI have been decreasing gradually from W2 of 2010 up to week-29 , whereas the percentages of diarrheal diseases were increasing till reporting week-28; then it has started to decrease up to week 33. As the line-chart below, shows the percentage of ARI in comparison with previous week-48 of 2010 has increased by 1.7% to 22.1%, and the percentage of ADD has further decreased by 0.3% to 5.5%. It should be mentioned that the percentages of both ARI and ADD from total clients during Summer Season of 2010 were very close to each other, whereas in summer season of previous years these percentages were much different and far from each other; the reason could be the difference in weather this year with previous years. These two groups of diseases crossed each other in week-36 of 2010 and continued their course onwards in paradox manner, namely the percentage of ARI continues increasing, whereas the percentages of ADD are decreasing. In the reporting week 48, the highest percentage of ARI-C&C has been recorded in Paktia and Laghman provinces with 28% each, whereas the lowest percentages of ARI-C&C were reported from Ghor province with 7%. The highest percentages of pneumonia reported from Jawzjan provinces with 12%.

**Percentages of ARI and ADD from Total Clients in 2010 by weeks**



## Outbreak Investigation and Response in the epidemiological weeks 48-49/2010

Reported outbreaks since first week of 2010 to date			
Type of outbreak	Investigated	Rumor	Clinically/lab
Pertussis	12	1	11
Avian/Swine Flu	0	0	0
ARI	3	0	3
Measles	95	10	85
Diarrhea	16	0	16
Meningitis	2	1	1
Hepatitis	1	0	1
Malaria	1	0	1
Typhoid	2	0	2
CCHF	0	0	0
Bl. Diarrhea	1	0	1
Chickenpox	3	0	3
Other	10	0	10

### Epidemiological Week 48:

- **Suspected Measles:** reported from Andar village of Shahwalikot district, Kandahar province on Dec, 03, 2010, and investigation team dispatched to the area on the following day and when team return from field the report will be updated.

### Epidemiological Week 49:

- **Suspected Measles(Follow up):** reported from Andar village of Shahwalikot district, Kandahar province on Dec, 03, 2010, and investigation team dispatched to the area on the following day and when team return from field the report will be updated.

