

Epidemiological Week N<sup>o</sup> 32 (5 - 11 Aug 2006)

19 Aug 06/ Vol. 38/ DEWS 2006-32

## Contents

Reporting Units .....	2
Total number of consultations .....	2
DEWS Data, Epidemiological Week N <sup>o</sup> 32 2006.....	3
DEWS Data, Monthly Summary (Epidemiological Weeks N <sup>o</sup> 29-32) .....	4
Acute Watery Diarrhoea .....	5
Bloody Diarrhoea.....	6
Acute Jaundice Syndrome.....	7
Malaria .....	8
Measles .....	8
Acute Respiratory Infection .....	8
Other Reportable Diseases and Conditions .....	9
Outbreak Alert and Response .....	10
Special Supplement: Monsoon 2006.....	12
Number of reported cases and deaths per District, AJK .....	14
Number of reported cases and deaths per District, NWFP .....	15



## Highlights

- In the past month (Epidemiological weeks 29-32 inclusive), 377,479 health events under surveillance were reported including 87 deaths.
- This week, 276 reporting units reported a total of 94,426 consultations, including 18 deaths.
- There were 10 cases of measles reported, a 50% drop from week 31
- 15,206 cases of AWD were reported; outbreaks were reported in three of the five districts
- 15,154 cases of ARI were reported, with 2 deaths
- Monsoon floods have caused injury, death, and displacement of people throughout the country. A special supplement is included

*The Weekly Morbidity and Mortality Report (WMMR) is published by the Ministry of Health of Pakistan (MOH) and the World Health Organization (WHO). The WMMR is built on surveillance data that health service providers and NGOs transmit on a weekly basis from health facilities and hospitals in those areas affected by the earthquake that struck Pakistan on 8 October 2005.*

*The WMMR objectives are to monitor the trend of health conditions over a period of time and provide vital information to all health partners. The WMMR is only a snapshot of the health conditions in those facilities where events are registered and data collected and does not necessarily reflect the situation from other health facilities.*

*The WMMR is a publication that has been developed for emergencies and previously used in other areas such as the Darfur Crisis.*

The WMMR is published by the World Health Organization (WHO),  
Health Emergency Operation Centre, House #6, Street #20, F-7/2, Islamabad, Pakistan  
For More Information, please contact:

Dorcas Taylor, Epidemiologist, WHO/EHA/Pakistan; [taylor@egpak.emro.who.int](mailto:taylor@egpak.emro.who.int) or  
Dr. Birjees Mazher Kazi, Chief, Public Health Laboratories Division, NIH MOH; [kazis@isb.paknet.com.pk](mailto:kazis@isb.paknet.com.pk) or  
WHO Webpage: <http://www.who.org/disaster>

## Reporting Units

The number of sites able to report in week 32 increased by 30 this week, from 246 to 276. The larger number of reporting sites takes into account field camps as well as fixed sites. See Table 1 for summary statistics.

Table 1. Reported health facilities by district, Earthquake Affected Areas, Pakistan, 5 - 11 Aug 2006.

Area	Population	Reporting Health Facilities			
		15 - 21 July	22 - 28 July	29 July - 4 Aug	5 - 11 Aug
		Week 29	Week 30	Week 31	Week 32
Muzaffarabad	894,364	76	74	72	96
Bagh	452,532	32	31	28	32
Poonch	633,712	41	49	45	47
Mansehra / Balakot	1,154,804	69	64	61	63
Battagram / Shangla	592,256	36	39	40	38
<b>Total</b>	<b>3,727,668</b>	<b>254 (92%)</b>	<b>257 (93%)</b>	<b>246 (78%)</b>	<b>276 (86%)</b>

## Total number of consultations

As a result of more reporting sites, the number of consultations increased in week 32 to 94,426, an increase of 13%. Muzaffarabad district experienced the largest increase in reporting sites. The highest number of consultations by district was in Muzaffarabad, with 32,600, and the lowest was in Battagram, at 8,774. The average number of consultations per facility continued to decline, and now stands at 336, down from 346 in week 31 and 376 in week 30. The Independence Day holiday, when many clinics were closed, may have resulted in fewer consultations. The maximum number of consultations in a facility was 5998, in Muzaffarabad, and the minimum was 17, also in Muzaffarabad.

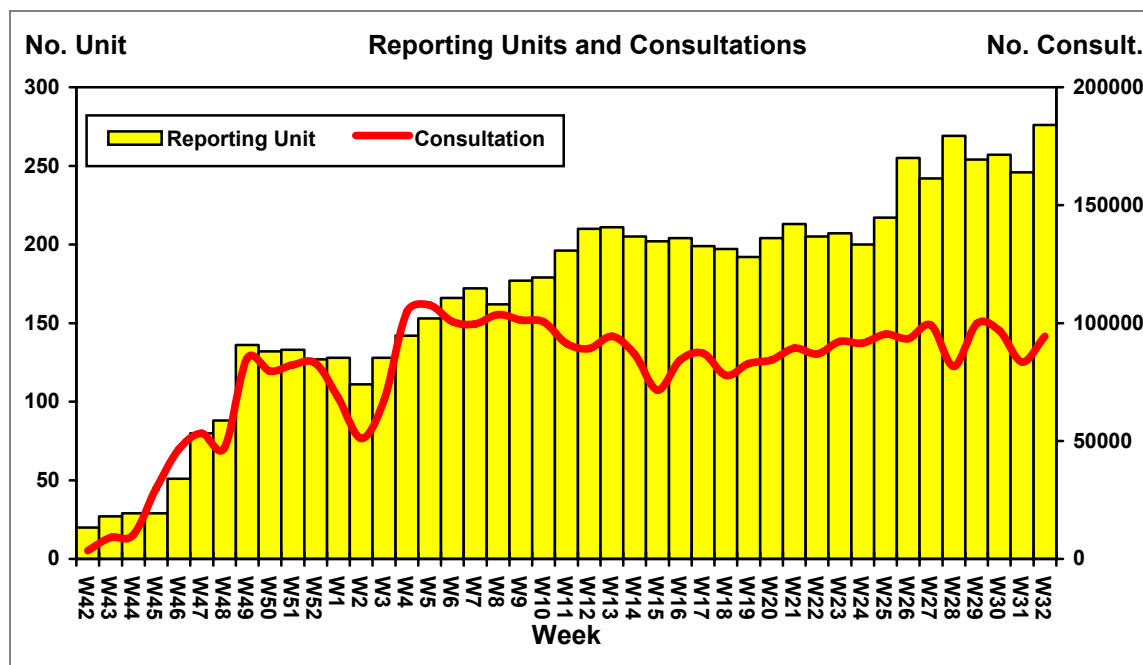


Figure 1. Weekly trend of reporting units and total number of consultations, Earthquake Affected Areas, Pakistan, 15 October 2005 – 11 Aug 2006.

**DEWS Data, Epidemiological Week N<sup>o</sup> 32 2006**

Between 5 - 11 Aug 2006, **94,426** consultations for health events under surveillance were reported through DEWS. Overall, **16%** (15,154) were due to Acute Respiratory Infections (**ARI**), **16%** (15,206) due to Acute Watery Diarrhoea (**AWD**), **6%** (5,574) due to Fever of Unknown Origin (**FUO**), and **5%** (4,823) due to Injuries (**INJ**). **ARI** attributed to **21%** and **15%** of consultations in the less than 5 years old and 5 or more years old respectively. All other reportable conditions, with the exception of bloody diarrhoea (1.25% of all consultations), each represented less than 1% of the total consultations in week 32.

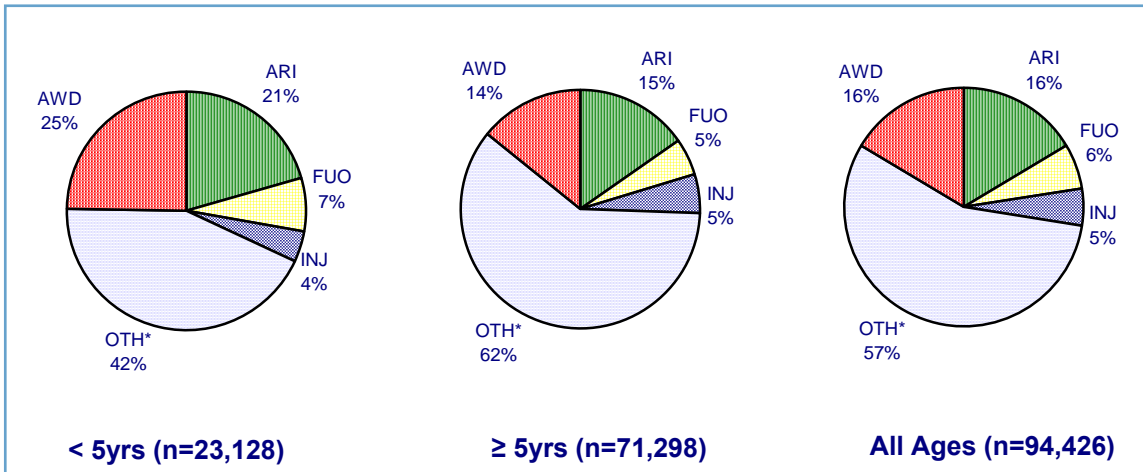


Figure 2. Proportion of primary causes for all reported cases, Earthquake Affected Areas, Pakistan, 5 – 11 August 2006.

\*OTH includes all other reportable conditions, plus all other consultations for conditions not under surveillance

**DEWS Data, Epidemiological Week N<sup>o</sup> 30, 2006: Consultations by age**

ARI remains the single greatest reason for consultation in both age groups, however when waterborne diseases (acute watery diarrhoea, bloody diarrhoea, and acute jaundice syndrome) are considered as a group, they match or surpass the rate of ARI. In patients under five, waterborne diseases account for 25% of all consultations, while ARI accounts for 21%. In patients five years and over, waterborne diseases are 15% of all consultations, matching the rate of ARI.

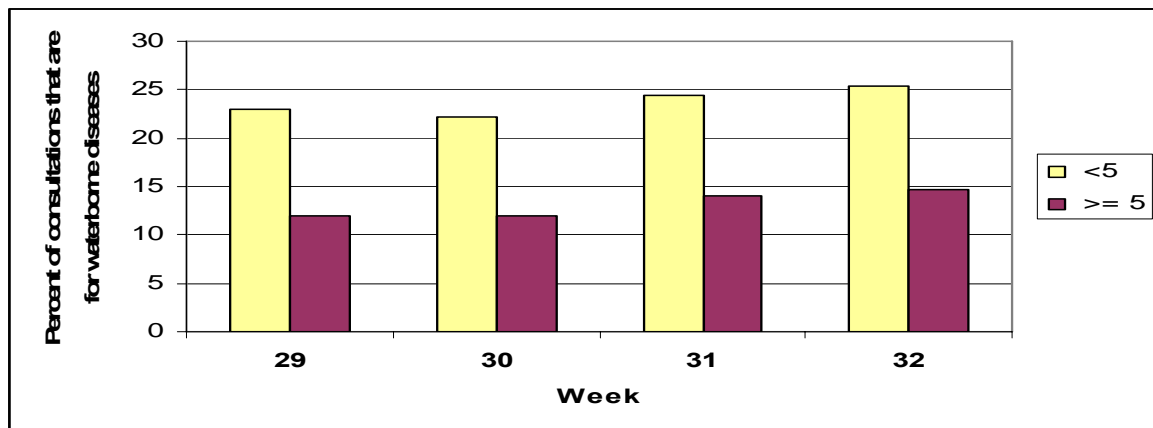


Figure 3: Waterborne diseases as a percentage of all consultations, by age group and week, Earthquake Affected Areas, Pakistan, 15 July – 11 August 2006.

\*Waterborne diseases include acute watery diarrhoea, bloody diarrhoea, and acute jaundice syndrome

**DEWS Data, Monthly Summary (Epidemiological Weeks N<sup>o</sup> 29-32)**

In summary for the past month between 5 to 11 Aug (Epidemiological weeks 29-32 inclusive), 169,574 consultations for health conditions under surveillance were reported, out of a total 377,479 consultations. **17%** (65,304) of consultations were due to acute respiratory infection (**ARI**), **15%** (55,645) acute watery diarrhoea (**AWD**), **6%** (22,290) Unexplained Fever (**FUO**) and **5%** (19,431) Injuries (**INJ**).

Table 2. Comparison of the weekly distribution of reported cases, deaths and monthly Case Fatality Rate (CFR), Earthquake Affected Areas, Pakistan, 15 July - 11 Aug 2006.

Week Event	WEEK 29		WEEK 30		WEEK 31		WEEK 32		TOTAL		CFR%
	C	D	C	D	C	D	C	D	C	D	
<b>AWD</b>	13621	<b>6</b>	13102	<b>0</b>	13053	<b>0</b>	15206	<b>1</b>	55645	<b>7</b>	<b>0.013</b>
<b>BD</b>	1004	<b>0</b>	961	<b>0</b>	757	<b>1</b>	921	<b>0</b>	3711	<b>1</b>	<b>0.000</b>
<b>AFP</b>	4	<b>0</b>	0	<b>0</b>	0	<b>0</b>	2	<b>0</b>	6	<b>0</b>	<b>0.000</b>
<b>MAL</b>	802	<b>0</b>	648	<b>0</b>	555	<b>0</b>	716	<b>0</b>	2727	<b>0</b>	<b>0.000</b>
<b>ARI</b>	17774	<b>2</b>	16887	<b>0</b>	15015	<b>5</b>	15154	<b>2</b>	65304	<b>9</b>	<b>0.014</b>
<b>MES</b>	9	<b>0</b>	31	<b>0</b>	21	<b>0</b>	10	<b>0</b>	71	<b>0</b>	<b>0.000</b>
<b>MEN</b>	8	<b>0</b>	1	<b>0</b>	2	<b>0</b>	0	<b>0</b>	11	<b>1</b>	<b>0.000</b>
<b>JAU</b>	107	<b>0</b>	61	<b>0</b>	48	<b>1</b>	161	<b>0</b>	377	<b>1</b>	<b>0.000</b>
<b>TET</b>	0	<b>0</b>	0	<b>0</b>	1	<b>1</b>	0	<b>0</b>	1	<b>1</b>	<b>0.000</b>
<b>AHF</b>	0	<b>0</b>	0	<b>0</b>	0	<b>0</b>	0	<b>0</b>	0	<b>0</b>	<b>0.000</b>
<b>FUO</b>	6092	<b>0</b>	5874	<b>1</b>	4707	<b>0</b>	5574	<b>1</b>	22290	<b>1</b>	<b>0.004</b>
<b>INJ</b>	4870	<b>0</b>	5436	<b>0</b>	4189	<b>0</b>	4823	<b>0</b>	19431	<b>0</b>	<b>0.000</b>
<b>OTH</b>	55557	<b>24</b>	53856	<b>15</b>	45152	<b>12</b>	51859	<b>14</b>	207905	<b>66</b>	<b>0.032</b>
<b>TOTAL</b>	<b>99848</b>	<b>32</b>	<b>96857</b>	<b>16</b>	<b>83500</b>	<b>20</b>	<b>94426</b>	<b>18</b>	<b>377479</b>	<b>87</b>	
<b>RU</b>	<b>254</b>		<b>257</b>		<b>246</b>		<b>276</b>				

C – Cases, D – Deaths, AWD - Acute Diarrhoea, BD - Bloody Diarrhoea, AFP - Acute Flaccid Paralysis, MAL – Malaria, ARI - Acute Respiratory Infection, MES – Measles, Men - Meningitis, JAU - Acute Jaundice Syndrome, TET - Neonatal Tetanus, AHF Acute Hemorrhagic Fever, FUO –Unexplained fever, INJ – Injuries, OTH – Others, RU – Reporting Units. Please note data from late reporting in previous weeks has been updated.

During the same reporting period, **93,386** consultations were reported in the **less than 5 years** old group, (**25%** of the total consultations), of which **23%** (21,254) were due to **ARI**, **22%** (20,946) due to **AWD**, **7%** (6,475) due to **FUO** and **4%** (3,884) were reported as injuries (**INJ**).

Table 3. Total number of reported cases, deaths and monthly Case Fatality Rate (CFR), less than 5 years old, Earthquake Affected Areas, Pakistan 15 July - 11 Aug 2006.

Week Event	WEEK 29		WEEK 30		WEEK 31		WEEK 32		TOTAL		CFR%
	C	D	C	D	C	D	C	D	C	D	
<b>AWD</b>	5318	<b>1</b>	5129	<b>0</b>	4730	<b>0</b>	5563	<b>0</b>	20946	<b>1</b>	<b>0.005</b>
<b>BD</b>	371	<b>0</b>	281	<b>0</b>	216	<b>0</b>	269	<b>0</b>	1165	<b>0</b>	<b>0.000</b>
<b>AFP</b>	0	<b>0</b>	0	<b>0</b>	0	<b>0</b>	2	<b>0</b>	2	<b>0</b>	<b>0.000</b>
<b>MAL</b>	179	<b>0</b>	176	<b>0</b>	130	<b>0</b>	161	<b>0</b>	647	<b>0</b>	<b>0.000</b>
<b>ARI</b>	6019	<b>2</b>	5672	<b>0</b>	4709	<b>4</b>	4730	<b>2</b>	21254	<b>8</b>	<b>0.038</b>
<b>MES</b>	7	<b>0</b>	10	<b>0</b>	5	<b>0</b>	5	<b>0</b>	27	<b>0</b>	<b>0.000</b>
<b>MEN</b>	0	<b>0</b>	0	<b>0</b>	2	<b>0</b>	0	<b>0</b>	2	<b>1</b>	<b>0.000</b>
<b>JAU</b>	30	<b>0</b>	9	<b>0</b>	14	<b>0</b>	31	<b>0</b>	84	<b>0</b>	<b>0.000</b>
<b>TET</b>	0	<b>0</b>	0	<b>0</b>	0	<b>0</b>	0	<b>0</b>	0	<b>0</b>	<b>0.000</b>
<b>AHF</b>	0	<b>0</b>	0	<b>0</b>	0	<b>0</b>	0	<b>0</b>	0	<b>0</b>	<b>0.000</b>
<b>FUO</b>	1753	<b>0</b>	1807	<b>0</b>	1217	<b>0</b>	1690	<b>1</b>	6475	<b>1</b>	<b>0.015</b>
<b>INJ</b>	968	<b>0</b>	1115	<b>0</b>	861	<b>0</b>	934	<b>0</b>	3884	<b>0</b>	<b>0.000</b>
<b>OTH</b>	10249	<b>8</b>	10235	<b>4</b>	8492	<b>4</b>	9743	<b>7</b>	38900	<b>23</b>	<b>0.059</b>
<b>TOTAL</b>	<b>24894</b>	<b>11</b>	<b>24434</b>	<b>4</b>	<b>20376</b>	<b>8</b>	<b>23128</b>	<b>10</b>	<b>93386</b>	<b>34</b>	
<b>RU</b>	<b>254</b>		<b>257</b>		<b>246</b>		<b>276</b>				

In the current week, there was an increase in the number of cases of **AWD**, with **15,206** this week and **13,053** last week with **one** related death reported in a patient over 5 years old (**CFR 0.006%**). In the current week, **ARI** also slightly increased in the total number of cases as compared with the previous week (**15,015** last week and **15,154** this week). There were **2** deaths reported from **ARI** (**CFR 0.013%**). The weekly proportion of ARI and AWD is shown in figure 6.

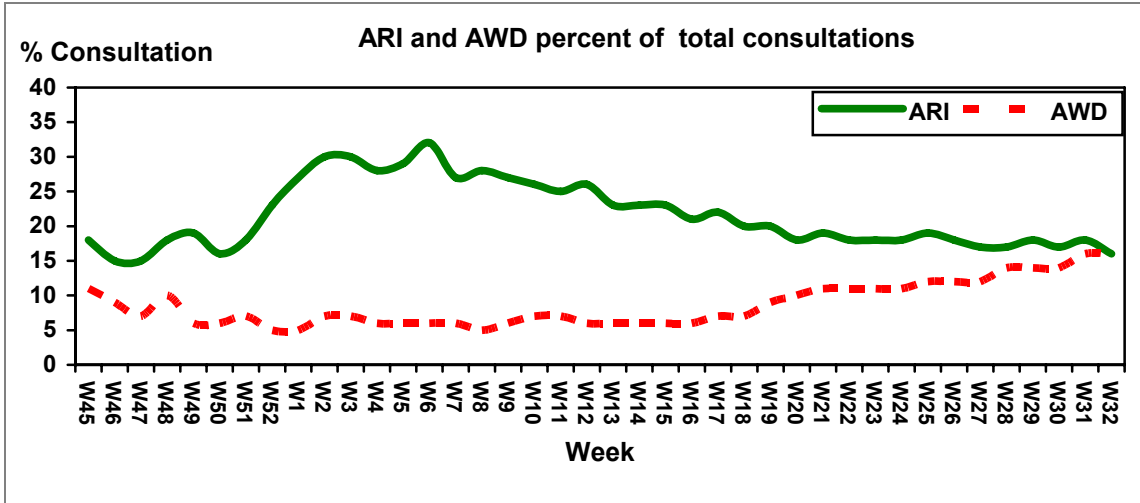


Figure 4. Weekly trend of percent of consultations for ARI and AWD, Earthquake Affected Areas, Pakistan, 5 November - 11 August 2006.

### Acute Watery Diarrhoea

During the epidemiological week 32, a total of 15,206 **AWD** cases were reported with no related deaths. AWD has now matched ARI as a percentage of all consultations, and is expected to surpass it in the coming weeks (see figure 4). Though AWD cases have increased in almost all facilities, there is a wide range in the proportion of consultations that are for AWD, when examined across reporting sites. In Mansehra, Muzaffarabad, and Poonch, some reporting sites had no cases of AWD. However, in the same district there were sites with up to 40-50% of their consultations for AWD. There were no sites in Battagram or Bagh that did not report some cases of AWD. The maximum proportion in Battagram exceeded 50% of all consultations.

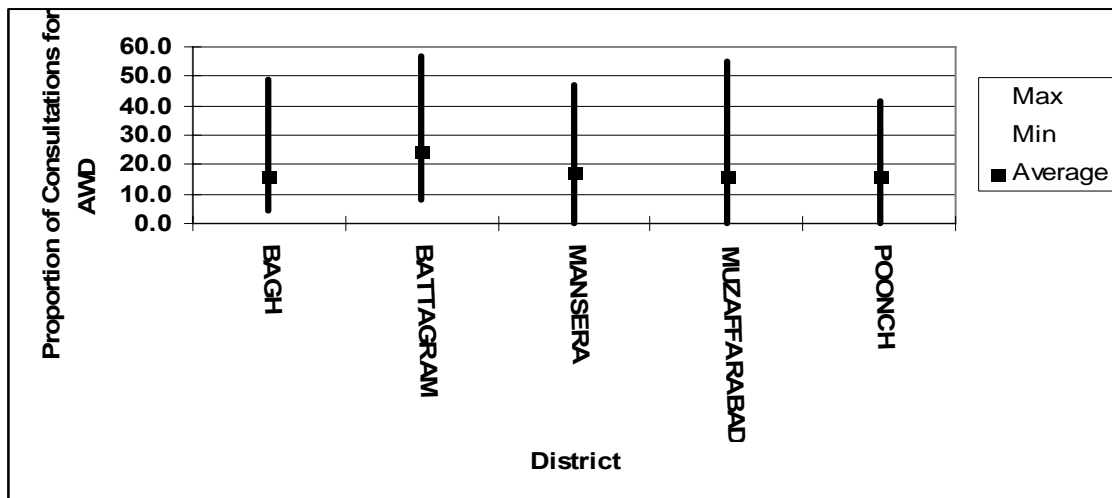


Figure 5: Minimum, maximum, and average percentages of AWD across reporting sites, Earthquake Affected Areas, Pakistan, 5 - 11 August 2006

The average rate of AWD across reporting sites is similar in Bagh, Mansehra, Muzaffarabad, and Poonch, ranging between 16 and 17%, but is higher in Battagram, where the average proportion of consultations for AWD is 26% (See figure 5). Battagram has been experiencing a generalized outbreak of AWD across the district as a result of heavy monsoon rains contaminating unprotected water sources. The trend in cases from July 30 to August 11 is shown in figure 6. For more details see the Alerts and Outbreaks page.

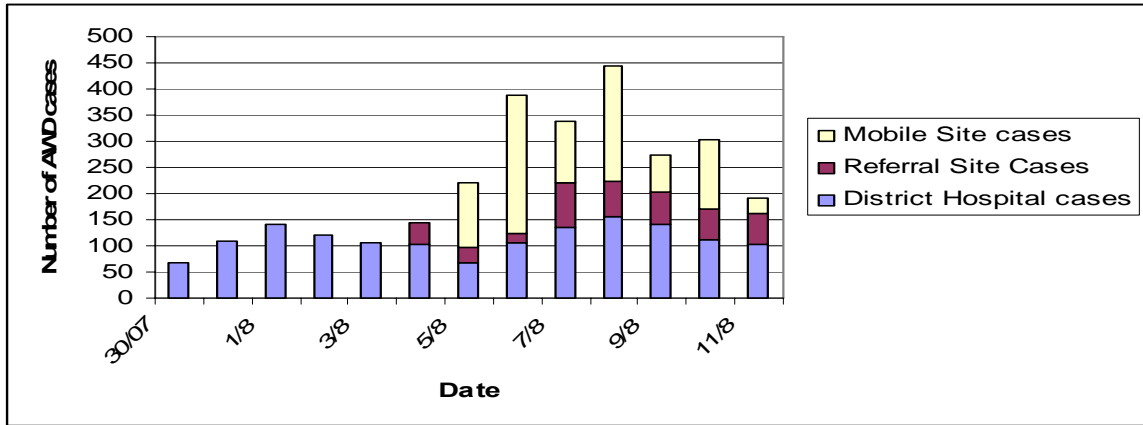


Figure 6: Battagram AWD outbreak cases, Earthquake Affected Areas, Pakistan, July 30 – 11 August, 2006

### Bloody Diarrhoea

In week 32, there were 921 cases of bloody diarrhoea reported, with no associated deaths. This is a 22% increase over week 31, however the number of cases is still less than that seen in weeks 29 and 30 (see table 2). In Muzaffarabad and Poonch districts, the profile of bloody diarrhoea cases in patients under 5 years and those 5 and over are very similar, showing the same pattern of change over time, though the proportions differ overall. However, in Battagram, Mansehra, and Bagh the patterns of bloody diarrhoea over time are different in the two age groups. Battagram shows the most marked difference in pattern by age group. In this district there has been a decline in the last month of bloody diarrhoea as a proportion of all consultations for the under five age group, while in patient 5 years and over, the proportion of consultations for bloody diarrhoea has been steadily increasing. See figures 7 and 8.

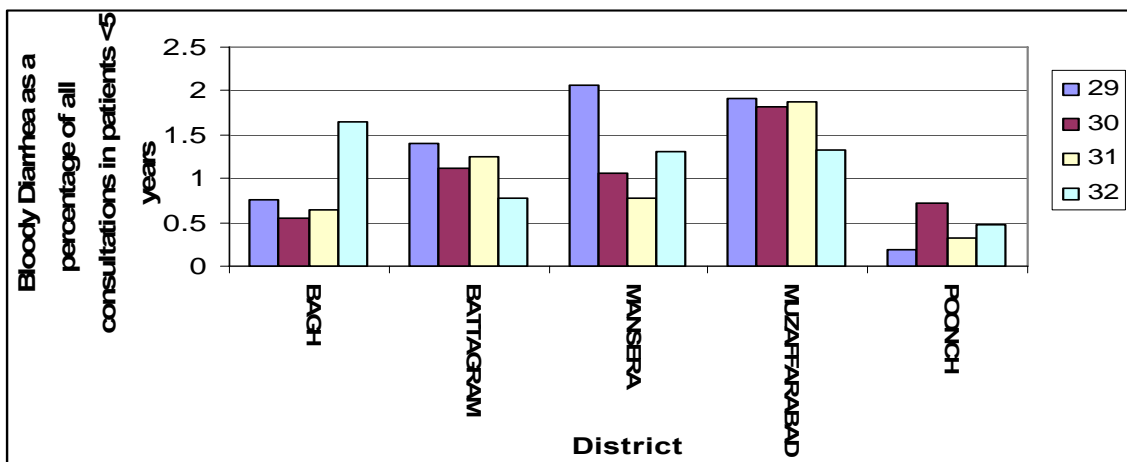


Figure 7. Bloody diarrhoea as a percentage of all consultations in patients < 5 years old, by district, Earthquake Affected Areas, Pakistan, 15 July – 11 August, 2006

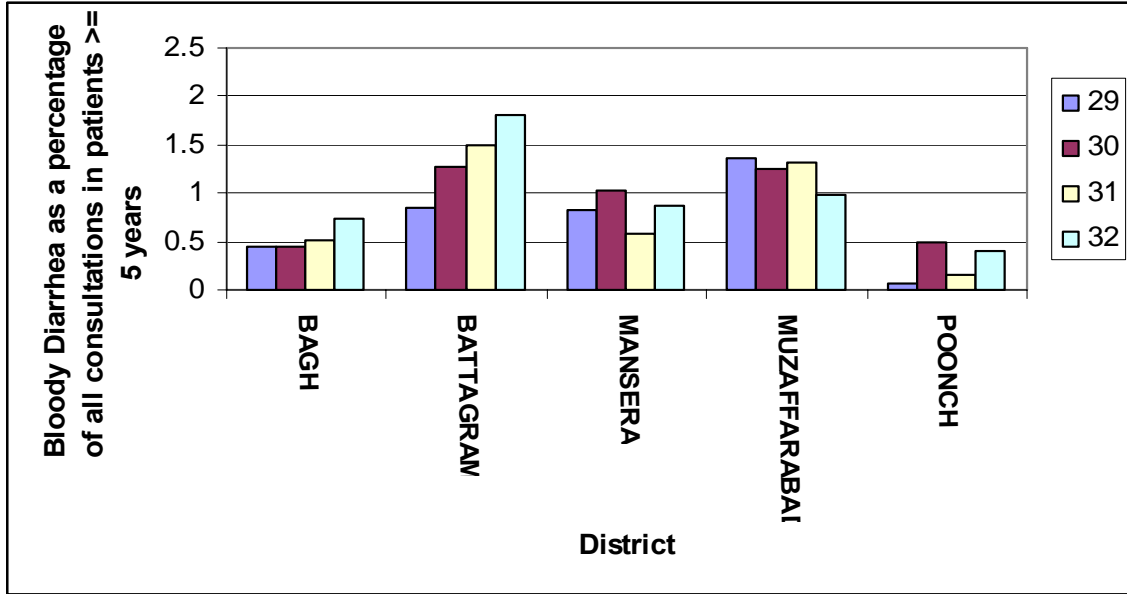


Figure 8 . Bloody diarrhoea as a percentage of all consultations in patients  $\geq$  5 years old, by district, Earthquake Affected Areas, Pakistan, 15 July – 11 August, 2006

**Acute Jaundice Syndrome**

In week 31, the acute jaundice cases did not show the rise that could be expected with the increase in contaminated water throughout the earthquake region. However, in week 32 there has been a large increase in the number of cases per reporting site in all districts but Poonch, where there were no cases of acute jaundice recorded. Overall, in week 32 there were 161 cases of acute jaundice recorded, with no associated deaths. The largest proportional increase was seen in Mansehra, where the number of cases per reporting site increased 8-fold. Mansehra and Battagram saw a quadrupling and tripling of cases per reporting site, respectively. The increase in Muzaffarabad was proportionally smaller, at 50%. See figure 9.

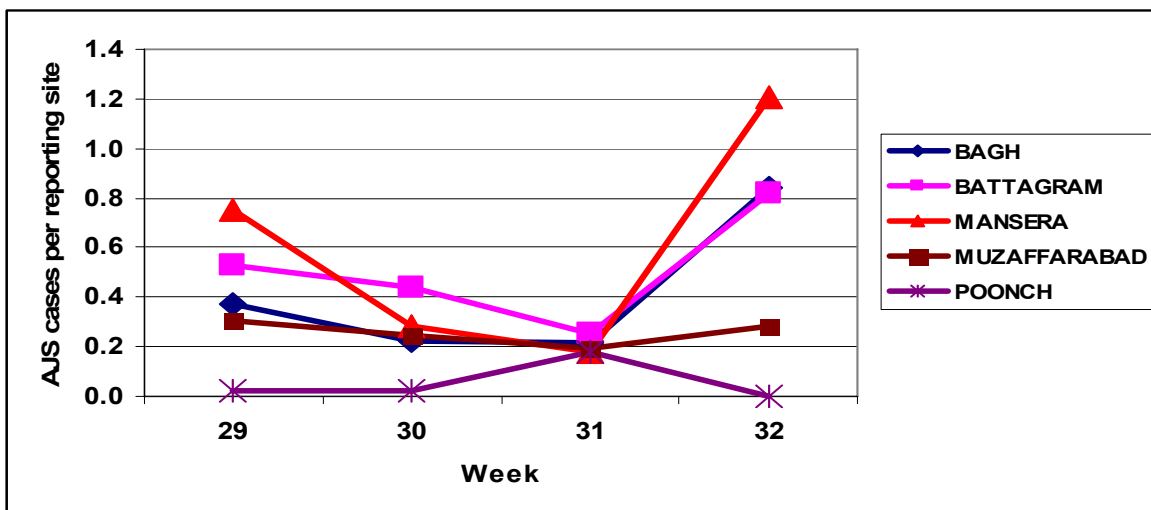


Figure 9: Acute jaundice cases per reporting site, by district, Earthquake Affected Areas, Pakistan, 15 July – 11 August 2006.

## Malaria

In week 32, there were 716 malaria cases reported, with no associated deaths. The distribution of malaria cases varies considerably both between and within the districts. The highest rate of malaria, as measured by cases per reporting site, is seen in Balakot tehsil (district Mansehra), which has 11 cases per reporting site (18 reporting sites in total). The lowest level is in Dhirkot and Khautta tehsils, districts Bagh, where there were no reported cases of malaria in week 32, across a total of 19 reporting sites. See figure 10.

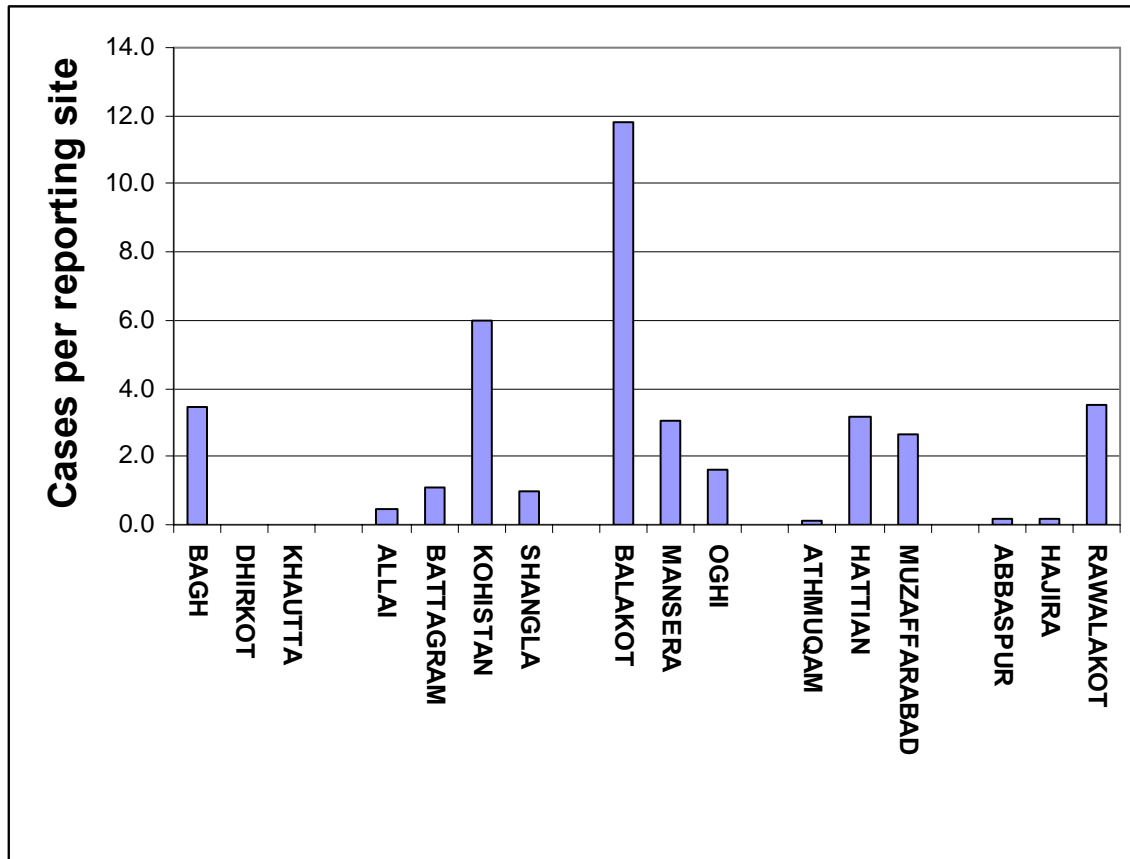


Figure 10: Malaria cases per reporting site by tehsil, Earthquake Affected Areas, Pakistan, 5 – 11 August 2006.

## Measles

In week 32 there were **10** suspected cases of measles in the earthquake-affected areas, continuing the drop that was seen from week 30 to 31. There were no reported cases from Poonch. Cases were evenly split between patients under five and five and over. With the exception of Bagh, in no district was there more than one case in a single site. In Bagh, there were 3 cases reported from PIMA, a large referral hospital.

## Acute Respiratory Infection

After experiencing a small rise in some districts in week 31, acute respiratory tract infections (ARI) resumed its decline as a proportion of all consultations in all districts in week 32. Battagram currently has the lowest rate of consultation for ARI, at 12.4%, and Poonch has the highest rate,

at 19.4%. Mansehra and Battagram experienced the largest percentage reduction in ARI between weeks 31 and 32, dropping from 16 to 13.6% and 15 to 12.8% respectively. There were 2 deaths in week 32 due to ARI.

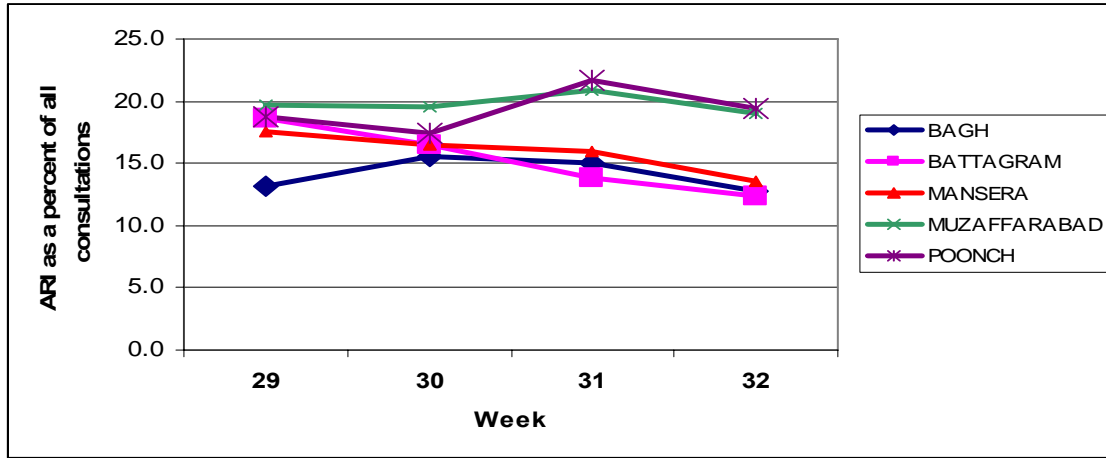


Figure 11: Weekly trend in ARI as an average percent of all consultations, by district, Earthquake Affected Areas, Pakistan, 15 July – 11 August, 2006

### Other Reportable Diseases and Conditions

There were two cases of acute flaccid paralysis reported in week 32, both in Battagram. There were no cases of hemorrhagic fever, meningitis, or tetanus in week 32.

Unexplained fevers account overall for 6% of all consultations, however, with the exception of Battagram, in all districts this diagnosis is used more commonly for children under 5 than for patients five years and over. The highest rate of unexplained fevers is found in Poonch district, where over 13% of consultations in children under five are recorded as unexplained fevers. The pattern in the over five age group is also higher than in other districts, with 10% of consultations for unexplained fevers. Whether this is indicative of a different disease distribution in Poonch district or different diagnosis habits is unknown; malaria or ARI could potentially be recorded as unexplained fever.

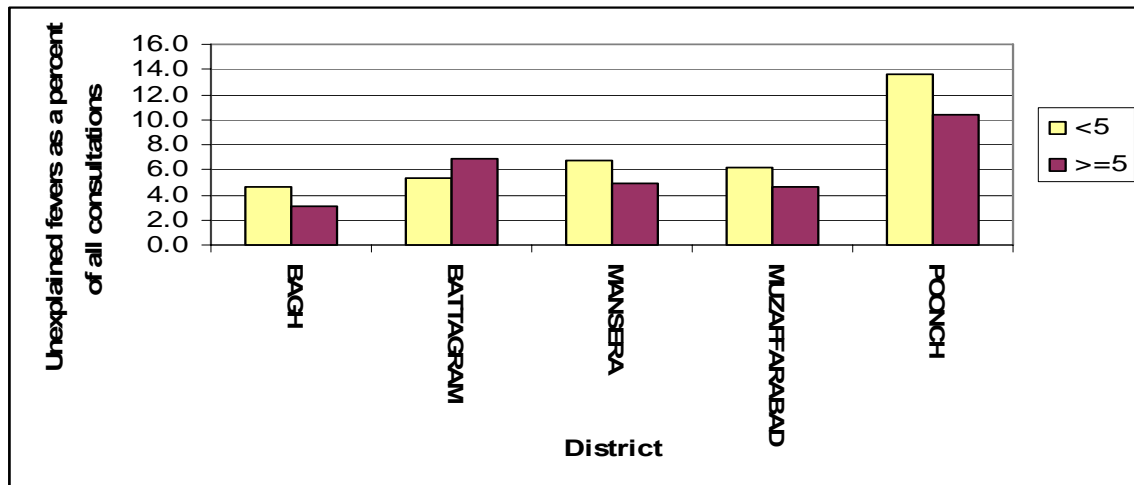


Figure 12: Unexplained fever as a percent of all consultations, by district and age group, Earthquake Affected Areas, Pakistan, 5 - 11 August 2006 .

## Outbreak Alert and Response<sup>1</sup>

### Acute Watery Diarrhoea

#### *Bagh*

The outbreak of watery diarrhoea that began in village Rerban in week 31 peaked in week 32. The maximum number of patients seen in the field camp fell on August 8<sup>th</sup>, with 43 patients in total. By August 11, the number of patients seen in the field camp had fallen to 7. Outbreaks were also seen at BHU Birpani (total 57 patients from August 1 to August 11) and BHU Mallot (total 108 patients from August 1 to August 11). The number of patients being seen in the diarrhoea treatment facility at DHQH also increased considerably in week 32, with a maximum number of 31 patients seen in one day, on August 8.

#### *Battagram*

The outbreak of watery diarrhoea first seen in week 30 continues, with 1368 patients having been seen in the DHQ hospital between 30<sup>th</sup> July and 11<sup>th</sup> August, 928 patients seen by mobile units, and 422 in the designated referral sites. Lady Health Workers have been provided with hygiene materials to distribute in the communities, health technicians have received refresher training on case management and hygiene messages, and work has continued on supplying adequate water to DHQ. 2 adult and 2 pediatric treatment tents have been erected on the DHQ hospital site to accommodate the increased number of patients. Some health facilities have been designated as referral sites and supplemented with extra medications and, where necessary, beds, to relieve the pressure on the central hospital site.

#### *Muzaffarabad*

A report of severe acute watery diarrhoea was received from village Gail Sachhan. After 4 attempts, the surveillance team of WHO and ministry of health staff was able to reach the village on 9<sup>th</sup> August. They found that there had been one death of a 60 year old woman. A field camp was created in two rooms of a house donated by the community. 27 patients were seen on the first day, drugs were provided to the local BHU Lamniah, and soap and other hygiene materials were provided for distribution the next day. On August 10<sup>th</sup>, 121 patients were treated at the same location, and a house to house search for cases was undertaken. Water purification tablets were distributed, soap, ORS, and jerry cans were provided to each household. On the third day (11 August), 92 patients were treated. On no days was severe dehydration seen; patients were mild to moderately dehydrated. Active surveillance was undertaken in surrounding communities to prevent spread.

An investigation of 7 cases of AWD from Ghathama village reported in week 31 was undertaken. All cases were from a single family; there were no other households affected in the village. ORS and jerry cans were provided, and a plan for Lady Health Workers to visit the entire Union Council was enacted.

---

<sup>1</sup> Outbreak Investigation and response of Suspected Viral Hepatitis, Malaria, and Bloody Diarrhoea and Watery Diarrhoea would only take place when a cluster of cases is identified or there is an increase in the incidence of the disease.

(Note: Single death due to Diarrhoea and single case of reported severe dehydration among >5 years would be investigated)

## Acute Flaccid Paralysis

### ***Mansehra***

Two cases of acute flaccid paralysis were reported from DHQ Hospital Mansehra, one 8 year old child, and one 3 year old from two different communities. Stool samples have been taken and sent for analysis.

## Acute Jaundice Syndrome

### ***Muzaffarabad***

The Neelum cases (4) reported in week 31 are still inaccessible for investigation, though it appears there is no clustering as the cases are reported from disparate locations.

### ***Rawalakot***

One case of suspected hepatitis was investigated. The patient had been Rawalpindi and had fallen ill there, then came back to Rawalakot. There were no other affected individuals in the village. A blood sample was taken for confirmation.

## Meningitis

### ***Muzaffarabad***

The investigation of the alert received in week 31 yielded a negative test result for meningitis.

## Measles

### ***Muzaffarabad***

7 cases of measles were reported in week 31 in Qazi Abdul Hameed IDP camp. On investigation, no actual cases were found, and the entire camp had been immunized on 03-07-2006. The alert was found to be a reporting error. A similar situation was found at Basheer Shaheed Camp, where two cases were reported in week 31. On investigation, there were no cases.

### ***Rawalakot***

An alert was received August 9<sup>th</sup> of a suspected measles case in Pakgali village. The patient had been ill since August 5<sup>th</sup> with fever and rash, and had been in his village as well as that of his mother's parents, in Upper Chirooti. On the day of the investigation, August 9<sup>th</sup>, the rash had subsided to only his face. No other family members were affected. A blood sample was taken for confirmation and sent to NIH. A vaccination campaign for all children in the area will be undertaken in both areas.

## Special Supplement: Monsoon 2006

### Monsoon Displacements and Casualties

The monsoon rains this season have been particularly heavy, resulting in damage to buildings, loss of crops and livestock, and the displacement, injury, and death of people. According to UNDP statistics, 50 districts have been affected by flooding and landslides, 14 of these seriously, in NWFP, Punjab, Sindh, and Balochistan. 396 villages have been affected, containing 12,603 families. 296 deaths have been reported and 69 camps created for people displaced due to flooding or landslides. Some camps created in the wake of the earthquake have had to be relocated. Many areas have begun to collect surveillance data on the displaced persons. This supplement gives the general damage by district throughout the country, and known health problems up to August 15. Further updates will be provided in future WMMR as they are received.

#### Sindh

Seriously affected districts: Thatta (900 families), Badin

No casualties as a result of the rain, but 11 deaths due to gastrointestinal diseases caused by a lack of safe drinking water and adequate sanitation. In low lying areas there is standing water which may result in an increase in malaria cases in 4-5 weeks.

#### NWFP

Seriously affected districts: Charsadda, Mardan, Swabi, Karak

Overall: As of 15 August, 229 injuries, 211 deaths, 17,296 persons affected, 2,733 head of livestock lost (cattle, goats, buffalo, chickens), 2,889 houses destroyed, 5 relief camps established. Kashtara IDP camp relocated to Jaba (63 families from the Kashtara camp, 123 from flood affected areas).

##### *Mardan*

Relief camp established in Government Post Graduate College for 600-700 people. 20 emergency medical camps working, mass vaccination for cholera, typhoid, and hepatitis A in progress. Admissions for AWD (as of 17 August): 598. Insecticide spraying in progress.

##### *Chitral*

6 deaths due to landslides in Ghizer area. The Yerkhon-Brep bridge has collapsed resulting in the complete isolation of the valley on the other side.

#### Punjab

Seriously affected districts: Rawalpindi, Jehlum, Gujrat, Sialkot, Narowal, Gujranwala, Mandi Bahauddin, Layyah

One death by drowning reported. Flood relief camps in Rajanpur set up are 2-3 miles from the affected area, and people are reluctant to go there.

As of 15 August, the health situation in Punjab is as follows:

Districts	Mobile teams	Static posts	Patients treated	Persons vaccinated	Hospital referred	ORS distributed	Chlorination of water sources
Bhakkar	20	20	69 – fever unknown origin (FUO) Other – 112 Total – 181	208	Nil	240	Nil
Gujrat	21	21	FUO -336 AWD – 5 Skin diseases – 45 Other 657 Total 775	841	15	2505	35
MB Din	24	12	FUO – 2 AWD – 5 Injuries – 2 Other – 3 Total – 12	Nil	Nil	3600	Nil
Sargodha	35	34	Nil	1436	Nil	1184	654
DG Khan	1	16	FUO – 128 AWD – 179 Skin disease – 230 Other- 1173 Total - 1710	528	Nil	820	Nil
Muzaffargarh	28	37	FUO – 175 AWD – 50 Skin disease – 4 Other – 43 Total 272	260	Nil	220	3

### Balochistan

Seriously affected districts: Bolan, Sibbi

3 deaths and dozens reported missing in Bolan and Sibbi districts. Over 35 villages submerged. Road damage has been extensive, and some villages have been totally cut off from surrounding areas.

### AJK

No districts listed as seriously affected, though relocations necessary

Relocations due to landslides and floodings have changed the configuration of camps and created new ones.

Muzaffarabad District:

Individuals relocated to existing camps due to landslide or flood: 1,794

Individuals in new camps: 384

1,552 individuals relocated to Ahle-Hadith camp, 31 to BMS Hermain Shelter, 59 to Badhiyara, New camp Babe Neelum with 354 individuals created, 30 relocated to Hatian Bala, 200 relocated to Jalalabad Park, 24 relocated to Kucha Syedan Dawn, 43 to Lower Plate near School No. II, 204 relocated to Mera Tanolian I and 162 to Mera Tanolian II, 30 to new camp Mohalla Shahnara, 255 to Narrul Stadium, 234 relocated to Tariq Abad

**Number of reported cases and deaths per District, AJK**Table 6. Number of reported cases and deaths, **Bagh District**, Earthquake Affected Areas, Pakistan, 5 - 11 Aug 2006.

Week	AWD		BD		AFP		MAL		ARI		MEA		MEN		JAU		TET		AHF		UXF		INJ		OTH	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
29	1356	4	75	0	0	0	21	0	1948	0	0	0	0	0	12	0	0	0	0	0	341	0	608	0	10375	0
30	1461	0	70	0	0	0	31	0	2335	0	2	0	0	0	7	0	0	0	0	0	436	0	782	0	9655	0
31	1242	0	54	0	0	0	10	0	1530	0	0	0	0	0	6	0	0	0	0	0	201	0	368	0	6774	0
32	2128	0	112	0	0	0	45	0	1644	0	3	0	0	0	27	0	0	0	0	0	425	0	482	0	7990	0
<b>Total</b>	<b>6187</b>	<b>4</b>	<b>311</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>107</b>	<b>0</b>	<b>7457</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>52</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1403</b>	<b>0</b>	<b>2240</b>	<b>0</b>	<b>34794</b>	<b>0</b>

Table 7. Number of reported cases and deaths, **Poonch District**, Earthquake Affected Areas, Pakistan, 5 - 11 Aug 2006.

Week	AWD		BD		AFP		MAL		ARI		MEA		MEN		JAU		TET		AHF		UXF		INJ		OTH	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
29	2125	1	14	0	1	0	89	0	2566	0	0	0	0	0	1	0	0	0	0	0	1918	0	838	0	6153	8
30	2107	0	86	0	0	0	92	0	2707	0	0	0	0	0	1	0	0	0	0	0	1899	0	1288	0	7388	6
31	2116	0	24	0	0	0	114	0	2638	2	0	0	0	0	8	0	0	0	0	0	1240	0	886	0	5191	4
32	2214	0	55	0	0	0	79	0	2566	0	0	0	0	0	0	0	0	0	0	0	1486	0	678	0	6152	0
<b>Total</b>	<b>8562</b>	<b>1</b>	<b>179</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>374</b>	<b>0</b>	<b>10477</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6543</b>	<b>0</b>	<b>3690</b>	<b>0</b>	<b>24884</b>	<b>18</b>

Table 8. Number of reported cases and deaths, **Muzaffarabad District**, Earthquake Affected Areas, Pakistan, 5 - 11 Aug 2006.

Week	AWD		BD		AFP		MAL		ARI		MEA		MEN		JAU		TET		AHF		UXF		INJ		OTH	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
29	4404	0	454	0	0	0	312	0	6017	1	5	0	8	0	23	0	0	0	0	0	1505	0	2093	0	15809	9
30	4344	0	396	0	0	0	254	0	5619	0	22	0	1	0	18	0	0	0	0	0	1467	1	2225	0	14354	6
31	3956	0	384	1	0	0	198	0	5550	1	10	0	0	0	13	1	1	1	0	0	1623	0	1863	0	13043	5
32	5229	1	346	0	0	0	217	0	6181	2	4	0	0	0	27	0	0	0	0	0	1620	0	2511	0	16465	6
<b>Total</b>	<b>17933</b>	<b>1</b>	<b>1580</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>981</b>	<b>0</b>	<b>23367</b>	<b>4</b>	<b>41</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>81</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>6215</b>	<b>1</b>	<b>8692</b>	<b>0</b>	<b>59671</b>	<b>26</b>

**Number of reported cases and deaths per District, NWFP**Table 9. Number of reported cases and deaths, **Battagram District**, Earthquake Affected Areas, Pakistan, 5 - 11 Aug 2006.

Week	AWD		BD		AFP		MAL		ARI		MEA		MEN		JAU		TET		AHF		UXF		INJ		OTH	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
29	1906	0	95	0	0	0	72	0	1769	0	1	0	0	0	19	0	0	0	0	0	563	0	294	0	4809	1
30	1470	0	112	0	0	0	60	0	1502	0	5	0	0	0	17	0	0	0	0	0	433	0	319	0	5186	1
31	2127	0	135	0	0	0	56	0	1293	0	8	0	0	0	10	0	0	0	0	0	545	0	299	0	4919	2
32	2251	0	137	0	2	0	40	0	1104	0	2	0	0	0	31	0	0	0	0	0	571	0	247	0	4389	0
<b>Total</b>	<b>7754</b>	<b>0</b>	<b>479</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>228</b>	<b>0</b>	<b>5668</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>77</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2112</b>	<b>0</b>	<b>1159</b>	<b>0</b>	<b>19303</b>	<b>4</b>

Table 10. Number of reported cases and deaths, **Mansehra District\***, Earthquake Affected Areas, Pakistan, 5 - 11 Aug 2006.

Week	AWD		BD		AFP		MAL		ARI		MEA		MEN		JAU		TET		AHF		UXF		INJ		OTH	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
29	3859	1	366	0	3	0	313	0	5516	1	3	0	0	1	52	0	0	0	0	0	1795	0	1044	0	18683	6
30	4128	0	361	0	0	0	211	0	4907	0	2	0	0	0	18	0	0	0	0	0	1642	0	862	0	17828	3
31	3838	0	164	0	0	0	178	0	4253	2	3	0	1	0	11	0	0	0	0	0	1108	0	839	0	15879	1
32	3384	0	271	0	0	0	335	0	3659	0	1	0	0	0	76	0	0	0	0	0	1472	1	905	0	16863	4
<b>Total</b>	<b>15209</b>	<b>1</b>	<b>1162</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>1037</b>	<b>0</b>	<b>18335</b>	<b>3</b>	<b>9</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>157</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6017</b>	<b>1</b>	<b>3650</b>	<b>0</b>	<b>69253</b>	<b>14</b>

\*Data from Balakot Tehsil were merged with the data from Mansehra district.