



Mobile clinics operate 24-7 in many parts of Pakistan to respond to the health needs of affected population.
Photos by H. Ali/WHO

Highlights

- A new alert for acute watery diarrhoea (AWD) was reported from district Nowshera in Khyber Pakhtunkhwa province (KPK) on 7 August.
- The number of acute diarrhoea (AD) cases in KPK has reached 13 903. In the other provinces, the numbers of AD cases reported are: Punjab (5 635), Baluchistan (1039) and Sindh (5174).
- Surveillance teams are monitoring the AWD situation in the village of Pirbaba in Buner. The Health Cluster is carrying out health and hygiene promotion activities, and a health team is visiting the village regularly.
- Through active surveillance, 20 cases of diarrhoea with mild dehydration were detected in Chandan Gari in KPK.
- An alert for suspected AWD was reported from basic health unit (BHU) in Amankot, tehsil Pabbi in district Nowshera.
- From 29 July to 7 August, 35 snake bites were reported from the districts of Naseerabad and Jaffarabad in Baluchistan province.
- In the flood-affected districts of Punjab, 519 mobile teams and 363 static health facilities are providing health care services to affected communities.
- A high number of diarrhoea cases were reported from Tando Muhammad Khan in Sindh province. The surveillance team that investigated found the cases were reported from different locations. The Department of Health has reinforced health education through lady health workers.
- After initial health assessment, the Health Cluster adjusted its fund requirements to more than US\$56.2 million for the initial phase of the emergency response. Rapid health assessments of flood affected areas show increased morbidity of communicable diseases.



Situation overview and current scope of disaster

The National Disaster Management Authority reports that 12 million people have been affected by the floods. Based on a report from the Pakistan Army, the number of deaths has now reached 1 400. The number of deaths is increasing with each passing day, as more bodies are recovered. A total of 272 079 houses have been damaged.

In Sindh, the flood wave caused by heavy monsoon rains is sweeping through the province. According to Sindh's Provincial Disaster Management Authority, the floods are expected to affect around 560 000 people in 1 370 villages in 15 districts. The Meteorological Department has declared all areas on the banks of Indus River dangerous. Evacuation of people is underway and over 450 relief points have been established.

In district Muzffargarh, a major breach in the embankments near Taunsa Barrage has caused unprecedented flooding in Kot Addu Tehsil in the north. Alipur Tehsil in the south has also been flooded. Kot Addu, which did not receive any early warning, suffered heavy losses of houses, livestock, and cotton, sugar cane and rice crops. The flood waters continue to expand southwards.

Health situation/ alerts and outbreak

Khyber Pakhtunkhwa Province (KPK)

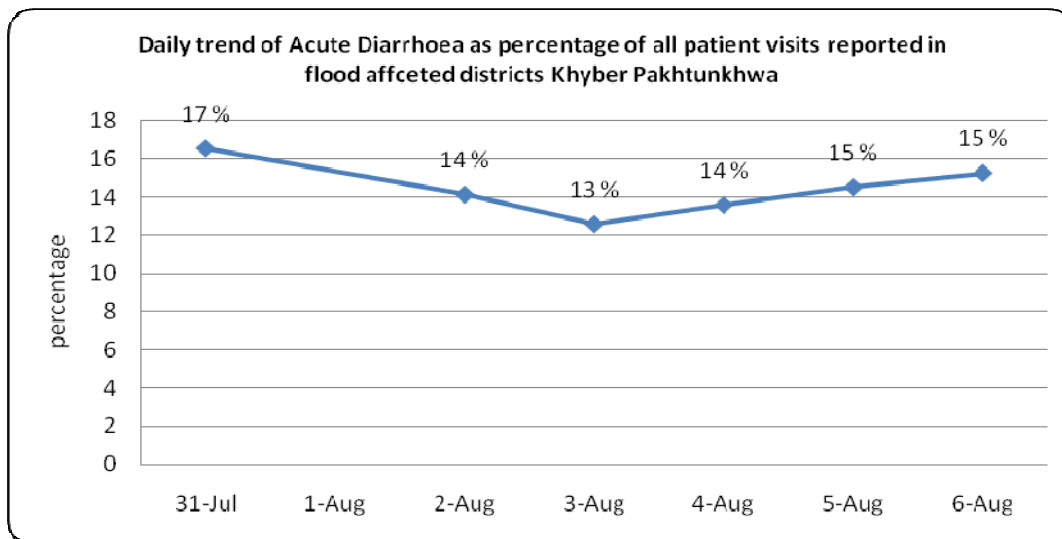
Forty three flood-affected districts in all four provinces shared daily disease surveillance data for 6 and 7 August 2010. A new AWD alert from district Nowshera, KPK was reported on 7 August and responded to. AWD cases in two villages are being continuously monitored; the situation has now stabilized. Between 6 and 7 August, 132 health teams and static health facilities from 8 flood-affected districts in KPK shared daily reports. Patient consultations have reached 25 053; the number of consultations is lower compared to previous days. The decline in the number of consultations is attributed to the continuous rains in the area.

AD accounted for 3820 (15%) of total patient consultations in all age groups. Skin infections were the leading cause of morbidity (4 678 consultations (19%)). Acute respiratory tract infections (ARI) were the third most common cause of consultation (3297 (13%) of all patient visits). The table below shows the daily number of cases reported from the flood-affected districts in KPK.

<i>Disease / condition</i>	<i>31 July</i>	<i>2 Aug</i>	<i>3 Aug</i>	<i>4 Aug</i>	<i>5 Aug</i>	<i>6 Aug</i>	<i>Total</i>
Acute diarrhoea	337	1 978	2 277	820	4 589	3 820	13 903
Acute jaundice syndrome		9		1	5	1	16
Bloody diarrhoea	59	22	70	51	112	106	421
Upper respiratory tract infection	276	737	1 528	881	3447	3049	10 019
Lower respiratory tract infection	34	179	109	221	398	248	1 194
Malaria		28	75	222	49	160	539
Skin infections	150	2 603	4 130	635	7 301	4678	19 726
Unexplained fever	125	945	1 122	164	1 836	164	4 362
Injuries				71	111	471	653
Others	1 056	7 503	8 800	2971	13 804	12356	46 603
Grand Total	2 037	14 004	18 111	6 037	31 652	25053	97 436

Acute diarrhoea

The daily trend of acute diarrhoea in the flood-affected districts indicates that the proportion of patients with acute diarrhoea is gradually increasing. The increase in the number of cases of diarrhoea is seen in Swat, Peshawar, Charsadda, Mardan and Nowshera. The figure below presents the daily trend of acute diarrhoea in flood-affected districts in KPK over the last six days.



An alert of suspected AWD was reported from basic health unit (BHU) in Amankot, tehsil Pabbi in district Nowshera. The BHU in Amankot was one of the health facilities affected by the floods. It was non-functional from 29 July but has resumed services as of 6 August. Since then, it has treated 20 patients for acute diarrhoea.

Surveillance teams are closely monitoring the AWD situation in the village of Pirbaba in district Buner. Health and hygiene promotion activities are being conducted and a health team is visiting the village regularly. No new suspected AWD cases have been reported from Pir Baba and its surroundings.

On 6 August, a medical team visited the village of Chandan Gari after receiving an AWD alert. Through active surveillance, 20 cases of diarrhoea with mild dehydration were detected in the locality. Health and hygiene education sessions were conducted by lady health workers (LHWs) and aqua tablets were provided. Stool and water samples were collected for laboratory tests. Water purification tablets were also donated.

Punjab province

A total of 519 mobile teams and 363 static facilities are providing health services in the flood-affected districts. On 7 August, a total of 62 497 patient consultations were reported. Skin diseases accounted for 18% of total patient consultations. AD accounted for 9%, with a high number of cases reported from Mianwali, Muzafargarh and Khushab. The table below shows the consultations by disease and by district in the flood-affected districts of Punjab.

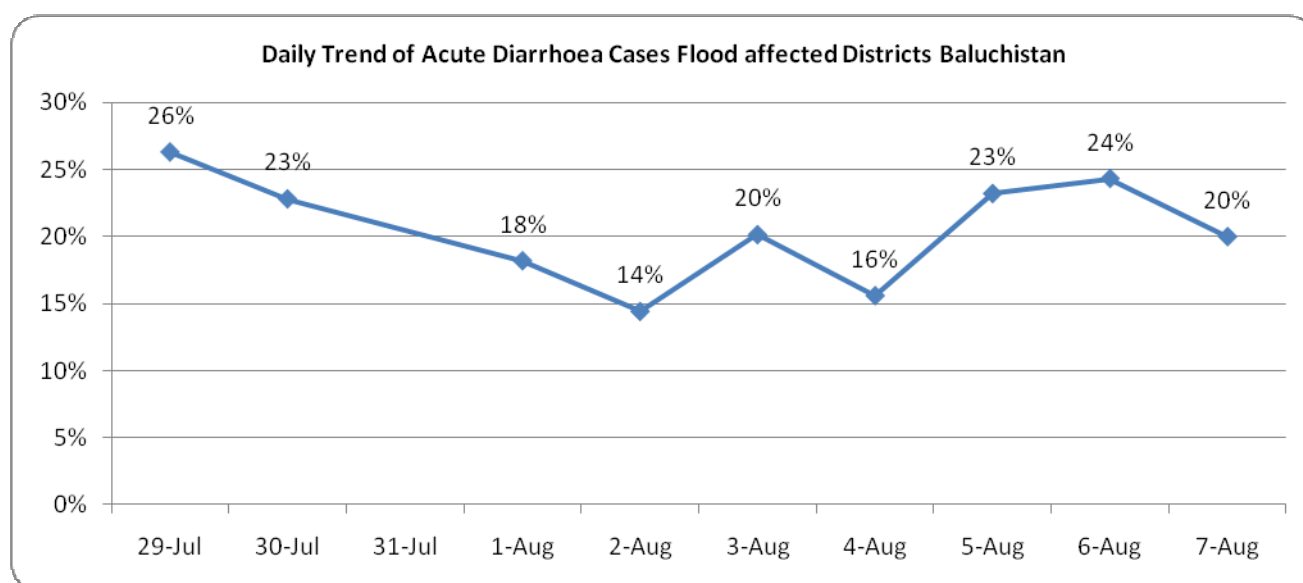
<i>District</i>	<i>RTI</i>	<i>Injuries</i>	<i>Skin inf</i>	<i>POU</i>	<i>Eye/ear</i>	<i>Dog bite</i>	<i>Snake bite</i>	<i>AD</i>	<i>Other Diseases</i>	<i>Total</i>
Attock	0	6	8	3	0	0	2	30	7	56
Bhakkar	512	0	170	0	0	0	0	103	781	1 566
B.Nagar	0	0	0	2	0	0	0	10	46	58
Gujrat	0	0	3	5	0	0	0	4	0	12
Hafizabad	0	18	89	52	0	18	0	42	0	219
Khanewal	31	4	101	45	0	0	28	12	80	301
Khushab	812	0	1 047	0	0	0	0	629	2 014	4 502
Lahore	201	0	57	36	0	3	0	101	9	407
Layyah	1 216	307	1 692	563	638	5	11	70	8 333	12 835
Mianwali	2 839	1 751	5 095	0	0	0	0	2 594	4 546	16 825
Muzafargarh	372	2	610	2 268	0	3	0	1 004	7 754	12 013
Nankana Sb.	0	0	0	0	0	10	2	58	0	70
R.Yar Khan	0	0	0	38	0	0	0	11	139	188
Rajanpur	0	0	0	0	0	1	2	0	2 597	2 600
Sialkot	0	18	199	16	0	0	0	72	297	602
Sargoda	2 160	824	2545	0	0	0	0	895	3 819	10 243
TOTAL	8 143	2 930	11 616	3 028	638	40	45	5 635	30 422	62 497

Baluchistan Province

- Four of the eleven flood-affected districts in Baluchistan shared daily disease reports on 7 August.
- A total of 1175 patient visits were reported in health facilities in the flood-affected areas. Scabies/skin disease accounted for 24% of patient visits; cases of diarrhoea accounted for 20%; and clinical malaria accounted for 19%. The table below presents the daily number of patients by disease in the four flood-affected districts that reported.

Disease / Health Problems	July - August, 2010									
	29-Jul	30-Jul	1-Aug	2-Aug	3-Aug	4-Aug	5-Aug	6-Aug	7-Aug	Total
Acute diarrhoea	56	52	81	42	113	32	84	347	232	1 039
Bloody diarrhoea	32	11	36	14	57	15	32	26	29	252
Clinical malaria	46	55	130	55	127	25	61	78	226	803
URTI	0	23	43	73	119	34	51	59	192	594
LRTI	0	0	0	0	11	0	3	7	6	27
Unexplained fever	2	10	42	15	43	10	6	19	55	202
Scabies	45	28	72	57	31	36	53	56	283	661
Sunstroke	0	10	0	0	0	0	0	0	0	10
Snake bite	5	1	4	5	1	2	2	9	6	35
E.N.T cases	27	16	27	23	32	30	42	25	54	276
Eye infection	0	22	10	7	27	21	28	25	62	202
Others (Sibi Only)	0	0	0	0	24	0	45	140	30	239
Total	213	228	445	291	561	205	362	791	1 175	4 271

- From 29 July to 7 August, 35 snake bites were reported from district Naseerabad and Jaffarabad.
- An increasing number of cases of AD has been reported in district Naseerabad. These cases are coming from different places (no clustering is reported by health care providers). Health hygiene education sessions are being conducted involving LHWs; water purification tablets have been distributed in affected communities. The figure below shows the daily trend of acute diarrhoea in the flood-affected districts of Baluchistan.



Sindh Province

- Fifteen (15) districts in Sindh province are submitting daily disease surveillance reports. There were 29 905 patient visits reported from fixed facilities and mobile medical camps in these districts.
- ARI was the leading cause of consultation (18% of total visits) followed by AD (17%) and skin disease (15%).
- High numbers of diarrhoea cases were reported from Tando Muhammad Khan. The surveillance team investigated and found the cases were reported from different places. The Department of Health has reinforced health education through LHWs. An increased number of AWD cases was also reported from Khairpur, Ghotki and Shikarpur. A surveillance officer will visit the districts from 9 August. The table below represents the number of patient visits by district and by disease.

<i>District</i>	<i>AD</i>	<i>BD</i>	<i>ARI</i>	<i>Malaria</i>	<i>Skin diseases</i>	<i>Others</i>	<i>Total</i>
Shikarpur	812	61	176	191	275	145	1 660
Ghotki	225	123	314	32	7	53	754
N. feroz	93	7	17	11	34	24	186
Benazeerabad	168	38	116	243	177	157	899
Jamshoro	27	20	120	0	59	30	256
Sukkur	52	33	74	56	65	88	368
Khairpur	227	6	210	155	226	240	1064
Larkana	54	28	74	80	55	116	407
Dadu	79	23	63	29	28	105	327
T M Khan	1 130	170	1312	675	774	65	4126
Kashmore	661	46	17	541	388	2 215	3868
Badin	708	97	480	0	407	2 654	4346
Thatta	662	0	1209	727	984	5 132	8714
Kambar	131	75	688	97	796	125	1912
Tando Allayar	145	39	397	0	212	225	1018
Total	5 174	766	5 267	2 837	4 487	11 374	29 905

Immunization activities

- In Kashmore, 57 children were vaccinated against polio. Children under two years old were also given BCG and pentavalent vaccines. Vaccinators visited tent camps and temporary shelters. Another 18 children received routine vaccination on 7 August.
- In DI Khan, 1 568 children received OPV and other routine immunization antigen.
- In Barkhan, routine EPI activities are ongoing in the flood-affected areas. On 7 August, 31 children were vaccinated against vaccine-preventable diseases.
- In Muzaffarabad, more than 500 children were immunized against measles.

Health impact

Medecins du Monde (Mdm) conducted a rapid assessment of health facilities in KPK between 4 and 6 August. The key findings of the assessment include the following:

Union Council (UC) Akora Khattak / Civil Hospital. The facility is totally non-functional. Most of the building was completely flooded and full of mud. At the time of the assessment, an International Medical Corps (IMC) team was setting up a clinic in the facility and was planning to begin outpatient services immediately.

UC Adamzai Basic Health Unit (BHU). The BHU is in good condition and fully operational. No drastic increase in patients' attendance rate was recorded by the staff. The BHU is being supported by drug donations from some volunteers.

BHUs in Shaidu and Jehangira. Both are functional and well supported.

UC Misri Banda civil dispensary. The civil dispensary in the village is totally submerged and full of mud. All equipment and furniture have been destroyed. No services are available. For the time being, dispensary staff are assisting medical camps organized by the Health Department once or twice a week.

UC Mughalki civil dispensary. All assets destroyed by the flood.

UC Agra BHU. The BHU is totally submerged and is not functional. All drugs, furniture and equipment have been destroyed by the floods.

Nutrition

WHO has asked for a rapid assessment in order to have a clear idea of the numbers and concentration of affected people and determine the immediate needs of groups at risk. The rapid assessment will begin on 10 August and will take 10 days. WHO will take the lead in setting up a nutrition surveillance system, based on the existing structure and regional guidelines.

Health cluster response

American Refuge Committee is supporting seven health facilities in Swat district, where 137 people have been treated. In Baluchistan district the organization is supporting five health facilities and has treated 315 patients.

Care International is supporting flood-affected people through four health facilities in Upper Swat district and 14 mobile clinics.

CERD gave 200 consultations in Nowshera district through a mobile team and distributed 400 face wash soaps, 200 laundry soaps and oral rehydration salts (ORS).

Church World Service conducted an average of 200 daily consultations in the last three days in Tehsil kabal, Charbagh and Matta in Swat district. In Mansehra, the organization conducted 150 consultations in Tehsil Headquarter Hospital Balakaot and treated 175 patients in its mobile clinic.

International Medical Corps is supporting a mobile medical unit at Government Higher Secondary School No. 1 in Peshawar City, where 2100 flood-affected people are residing. The unit has treated 325 patients. IMC is supporting referral services through ambulances.

Johanniter International is supporting Charsadda district through two mobile units.

Merlin continued its health activities through 11 mobile teams in Nowshera, Buner and Swat district of KPK. 4 200 patients have been treated. Merlin has been supporting 28 static clinics (12 Swat, 10 Buner, 6 Jalozai) and 3 mobile teams (Buner) .Merlin mobile teams were airlifted to remote locations in upper Swat.

The **National Health Emergency Preparedness and Response Network (NHEPRN)** and WHO sent a team of pharmacists to Chaklala airbase to receive and sort medical donations from various countries. NHEPRN, with support from WHO, is planning to set up a flood operations centre.

Pakistan Red Cross Society (PRCS), with support from the German Red Cross, is providing health services to four BHUs in district Shangla, and three BHUs in District Kohistan (BHU Doga, BHU Seo and BHU Razika). In District Nowshera, PRCS is providing services through two mobile health units that will be operational for the next two months.

Save the Children conducted 2 700 consultations at five health facilities in Swat, DI Khan and Buner on 5 August 2010. Two ambulances have been deployed from Buner to Swat district to assist in the relief and rescue efforts.

UNFPA is continuing its health support, including through maternal-neonatal child health services in 10 health facilities in Swat, Kohat Hangu, Lower Dir, DI Khan and Tank. UNFPA donated 31 clean delivery kits and 40 female hygiene kits.

United Nations Children's Fund (UNICEF) supports the surveillance of diarrhoeal diseases and has made ORS available in health facilities in affected areas. It has mobilized 155 000 sachets of ORS and has donated information, education and communication (IEC) materials on the prevention of diarrhoea prevention, use of ORS, immunization and hygiene & sanitation to LHWs in flood-affected districts. It is printing another 120 000 copies of IEC leaflets.

The **World Health Organization (WHO)** and UNICEF have directed polio teams in the districts to assist and facilitate relief efforts. WHO's focal point is Dr Soomar Khoso (Surveillance Officer, DEWS, Hyderabad).

In response to a request from the government of Sindh, WHO has transported 20 emergency kits and 20 diarrhoea kits from Islamabad. The kits are expected to reach Karachi today. WHO has also delivered 200 vials of anti-snake venom.

For further information contact

Dr Hendrikus Raaijmakers

Emergency Preparedness and Humanitarian Action Coordinator
e-mail: raaijmakersh@pak.emro.who.int

Alfred Dube

Health Cluster Coordinator
e-mail: dubeal@pak.emro.who.int

Syed Haider Ali

Communications Officer
mobile: 0092 3004005944
e-mail: alisy@pak.emro.who.int;
focus_ali@yahoo.com

Christina Banluta

Communications and Advocacy Officer
mobile: 0092 3085559639
e-mail: christinabanluta@gmail.com
banlutac@pak.emro.who.int