Pakistan Health Cluster

Floods in Pakistan

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Providing safe drinking water and sanitation services across the country is essential to avert the threat of waterborne diseases. *Photos by H. Ali/WHO* .

Highlights

- Initial assessment reports show that 30 health facilities have been damaged or destroyed in Khyber Pakhtunkhwa (KPK) province. Another 47 health facilities have been damaged in Punjab. In Baluchistan, 19 health facilities have been either damaged or destroyed.
- Between 31 July and 8 August, the most common diseases were scabies, respiratory tract infections, and acute diarrhoea. The number of acute diarrhoea (AD) cases in KPK has reached 20 399. In Punjab, the number AD cases reported is 9 659 while Baluchistan has reported 1 101cases and Sindh has so far reported 1 519 cases.
- On 8 August, 50 out of 62 flood-affected districts in all four provinces shared daily disease surveillance data. The cases of AWD in two villages from where alerts were previously received are being monitored.
- The Health Cluster has received US$9.5 million in commitments and pledges from USAID's Office of Foreign Disaster Assistance (OFDA), the Emergency Response Fund (ERF), the Government of Japan, the United Nations Central Emergency Response Fund (CERF), and the Italian Government (the latter in the form of life-saving drugs).
- As of 9 August, WHO, through its health partners, has distributed 142 cholera kits, 125 health emergency kits, 3 surgical supply kits, 550 vials of anti snake venom, 5 100 hygiene and newborn kits, and 700 clean delivery kits. These kits will cover the needs of around 800 000 people for one month.
- The Pakistan Health Cluster has asked the US State Department's Bureau of Population, Refugee and Migration (BPRM) to continue to support the Health Cluster's work in the IDP-affected areas. BPRM has already approved a total budget of US$ 4 million, and funds to continue the health response in the crisis-affected areas have been allocated. USAID/OFDA has pledged additional funds. A donation of medical supplies from the Italian Government is in the pipeline.

Situation overview and current scope of disaster

The United Nations has launched assessments in at least three provinces to identify severely affected families who require life-saving humanitarian assistance.

According to the National Disaster Management Authority (NDMA), 13.8 million people have been affected by the continuing floods. The number of deaths remains unchanged at 1400. A total of 288 170 houses have been damaged and 10 653 villages affected.

Health situation/ alerts and outbreak

Between 31 July and 8 August, the most commonly reported diseases were scabies, respiratory tract infections, and acute diarrhoea. The number of acute diarrhoea (AD) cases in Khyber Pakhtunkhwa (KPK) has reached 20 399. In Punjab, the number of AD cases reported is 9 659, while Baluchistan has reported 1 101 cases and Sindh has so far reported 1 519 cases.

- In Nowshera, an alert for suspected acute watery diarrhoea (AWD) was reported from Mardan Medical Complex. The patients are from Village Kandharo, Risalpur district Nowshera in Khyber Pakhtunkhwa. The DEWS team immediately responded, and active surveillance was carried out in the village. Stool samples from suspected cases were collected and sent for laboratory confirmation. Health and hygiene messages were communicated to residents in the community and aqua tablets were distributed. Follow up visits to the area will be conducted to monitor the situation.

- In Swat, active surveillance for AWD was conducted in Gulabad (Barikot) village. Forty households were visited and 179 community members were screened. Around 51 community members complained of diarrhoea; one case of bloody diarrhoea was identified. The village's common water source is a single water pump close to the nearby waterway. The surveillance team gave sachets of oral rehydration salts (ORS) to patients suffering from acute diarrhea, and distributed aqua tablets and educational materials among community members. Health awareness sessions on the importance of clean drinking water and on personal and environmental hygiene were also conducted.

- In Peshawar, the AWD situation in Chandan Ghari is being continuously monitored by a team from EDO-Health. By 8 August, 19 suspected cases of acute diarrhea without dehydration were reported from the area. Health and hygiene promotion activities by lady health workers (LHWs) are underway; the health team will continue visiting the area.

- In Kashmore, diarrhoea cases were reported from IDP camps. Sanitary conditions in the camps are rudimentary, and the town's water supply source is believed to be contaminated. LHWs are conducting health education sessions on proper hand washing, the use of safe drinking water, and the proper preparation of food.

Khyber Pakhtunkhwa (KPK)

In KPK, 67 health teams and static health facilities from seven flood-affected districts shared daily reports. A total of 12 352 patient consultations were reported. Acute diarrhoea (AD) accounted for **1 833 (15%)** of total patient visits in all age groups. Skin infections, which accounted for **2 015 (16%)** cases were the leading cause of morbidity. Acute respiratory tract infections (ARI) were the third most common cause of consultation (**1 712 (14%)** of total patient visits).

Distribution of daily patient visits by priority diseases, in the flood-affected districts of Khyber Pakhtunkhwa

Diseases/Conditions	31-Jul	2-Aug	3-Aug	4-Aug	5-Aug	6-Aug	7-Aug	8-Aug	Total
Acute diarrhoea	337	2 221	2 277	897	4 671	3900	4 263	1 833	20 399
Acute jaundice syndrome	-	9	-	1	5	1	15	-	31
Bloody diarrhoea	59	49	70	54	113	119	90	95	649
Injuries	-	-	-	71	111	477	298	38	995
Lower respiratory tract infections	34	179	109	221	403	248	210	200	1 604
Suspected malaria	-	28	75	222	54	162	85	46	672
Others	1 056	7 956	8 660	3157	14122	12 552	12 767	6 211	6 6481
Skin infections	150	2 647	4 270	710	7 325	4 723	5 083	2 015	26 923
Unexplained fever	125	945	1122	167	1 842	179	420	402	5 202
Upper respiratory tract infections	276	901	1 528	944	3 548	3 146	3 827	1 512	15 682
Total	2 037	14 935	18 111	6 444	32 194	25 507	27 058	12 352	138 638

Punjab province

Twenty-five flood-affected districts in Punjab shared their daily disease reports. A total of 1003 mobile teams and 917 static facilities are providing health services in these districts. On 8 August, a total of 109 822 patient consultations were reported. Skin diseases were the leading cause of morbidity, with 19% of total patient visits. Acute diarrhoea accounted for 9% of patient consultations; a high number of cases of diarrhoea were reported from Mianwali, Muzafargarh, Sargodha and Khushab. A total of 66 dog bites and 39 snake bites were also reported. A total of 687 176 ORS sachets and 61 630 aqua tablets were distributed in the affected communities.

Consultations by disease and by district in the flood-affected districts of Punjab

District	RTI	Injuries	Skin	POU	Eye Ear	Dog Bite	Snake Bite	AWD	Others	Total
Attock	0	10	14	5	0	0	2	56	12	99
Bhakkar	1 084	0	771	0	0	0	0	456	1 644	3 955
B.Nagar	0	0	13	5	0	0	0	14	56	88
Chiniot	0	0	0	0	0	0	0	42	0	42
D.G.Khan	0	0	0	0	0	0	0	42	0	42
Faisalabad	0	0	0	5	0	0	0	0	0	5
Gujrat	0	0	3	0	0	0	0	4	0	7
Hafizabad	0	33	191	77	0	23	1	68	0	393
Jhelum	0	0	292	89	0	2	3	174	1 067	1 627
Jhang	0	0	839	1 006	0	0	5	363	1 588	3 801
Khanewal	92	20	221	97	0	0	0	47	217	694
Khushab	1 222	0	1 468	0	0	0	0	997	3 408	7 095
Lahore	244	0	80	43	0	3	0	118	15	503
Layyah	2 549	606	3646	988	1 217	6	17	493	11 489	21 011
M.B.Din	29	0	35	0	0	0	0	38	25	127
Multan	0	0	0	0	0	0	0	137	0	137
Mianwali	3 866	1 751	7 920	0	0	0	0	3 379	6 922	23 838
Muzafargarh	1 144	110	1 670	9191	0	21	4	1 643	10 297	24 080
Nankana Sb.	0	0	0	0	0	10	2	58	0	70
Rawalpindi	25	4	32	0	0	0	0	0	0	61
R.Yar Khan	0	0	0	1 203	0	0	3	67	3 050	4 323
Rajanpur	0	0	0	0	0	1	2	0	2 597	2 600
Sialkot	0	18	199	16	0	0	0	216	297	746
Sahiwal	0	0	0	0	0	0	0	32	0	32
Sargoda	3 732	824	3416	0	0	0	0	1215	5 259	14 446
TOTAL	13987	3 376	20 810	12 725	1217	66	39	9659	47 943	109 822

Baluchistan Province

Four flood-affected districts in Baluchistan shared their daily disease reports on 7 August. A total of 1175 patient visits were reported at health facilities in the flood-affected areas. Scabies was recorded in 24% of patient visits, with diarrhoea at 20% and clinical malaria at 19%.

Daily number of patients by disease in the four flood-affected districts of Baluchistan.

Disease / Health Problems	July - August, 2010										
	29-Jul	30-Jul	1-Aug	2-Aug	3-Aug	4-Aug	5-Aug	6-Aug	7-Aug	8-Aug	Total
Acute diarrhoea	56	52	81	42	113	32	84	347	232	62	1101
Bloody diarrhoea	32	11	36	14	57	15	32	26	29	26	278
Clinical malaria	46	55	130	55	127	25	61	78	226	50	853
URTI	0	23	43	73	119	34	51	59	192	51	645
LRTI	0	0	0	0	11	0	3	7	6	4	31
Unexplained fever	2	10	42	15	43	10	6	19	55	36	238
Scabies	45	28	72	57	31	36	53	56	283	48	709
Sunstroke	0	10	0	0	0	0	0	0	0	0	10
Snake bite	5	1	4	5	1	2	2	9	6	2	37
E.N.T Cases	27	16	27	23	32	30	42	25	54	16	292
Eye infection	0	22	10	7	27	21	28	25	62	2	204
Others	0	0	0	0	24	0	45	140	30	9	248
Total	213	228	445	291	561	205	362	791	1175	306	4646

Sindh Province

Disease surveillance reports were received from 14 districts in Sindh. A total of 9 069 patient visits were reported from fixed facilities and mobile medical camps. Between 29 July and 8 August, acute respiratory infection was the leading cause of consultations, accounting for 22% of total visits, followed by skin disease - 20% - and acute diarrhoea - 17%. High numbers of diarrhoea cases are being reported from districts Tando Muhammad Khan and Khairpur. The surveillance team investigated and found the cases were from scattered places. The Department of Health has reinforced health education through LHWs in the district and is regularly monitoring the situation. An increase in the daily number of diarrhoea cases was also noticed in districts Khairpur, Ghotki and Shikarpur.

Table: number of patient visits by district and by disease in Sindh province.

District	AD	BD	ARI	Malaria	Skin diseases	Others	Total
Shikarpur	108	11	187	53	162	204	725
Sukkur	161	19	210	201	50	59	700
Larkana	56	8	40	88	132	635	959
Khairpur	225	15	182	135	174	79	810
Kashmore	12	56	150	236	78	468	1000
Ghotki	127	54	105	135	0	33	454
N. feroze	65	10	66	50	123	272	586
Dadu	178	56	356	46	167	189	992
Jamshoro	40	18	78	0	29	14	179
Benazeerabad	69	8	43	111	134	101	466
Matairi	0	0	0	0	0	0	0
Hyderbad	0	0	0	0	0	0	0
T. M. Khan	370	55	426	219	768	65	1903
Thatta	0	0	0	0	0	0	0
Total	1519	310	2030	1274	1817	2119	9069

Health impact

Save the Children conducted rapid assessments in KPK (one in flood-affected villages of Dera Ismail Khan (D I Khan) on 6 August and one in Swat district on 3 August). The findings are as follows.

DI Khan

- Community members in 61% of villages have no access to functional health facilities. Most village health facilities have been severely affected by the flood water, and many are unusable. Likewise, community members in 23% of villages reported that they had access to private clinics, which are also usually located in urban areas.

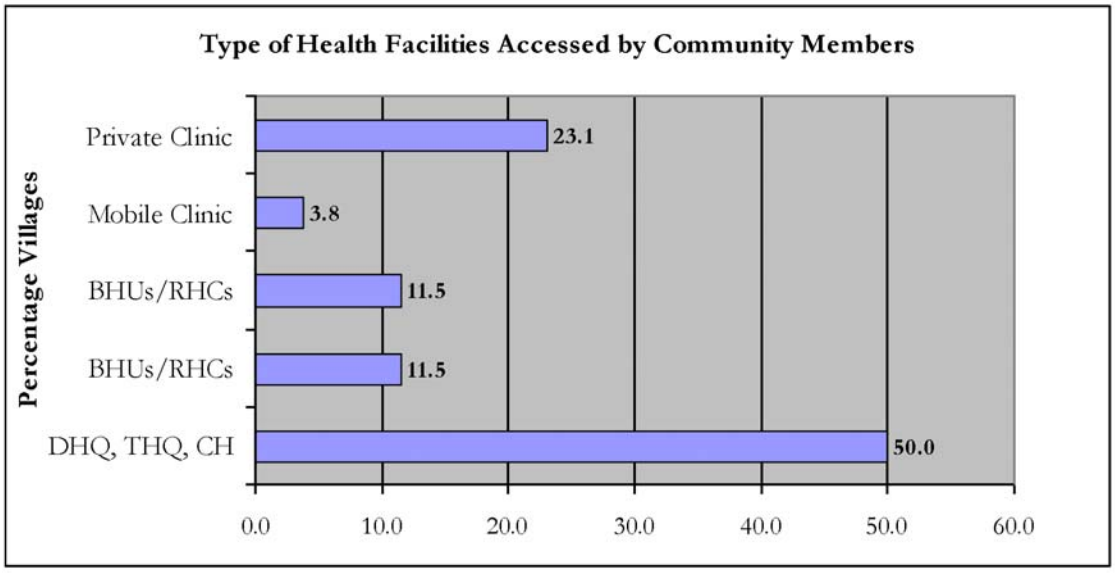
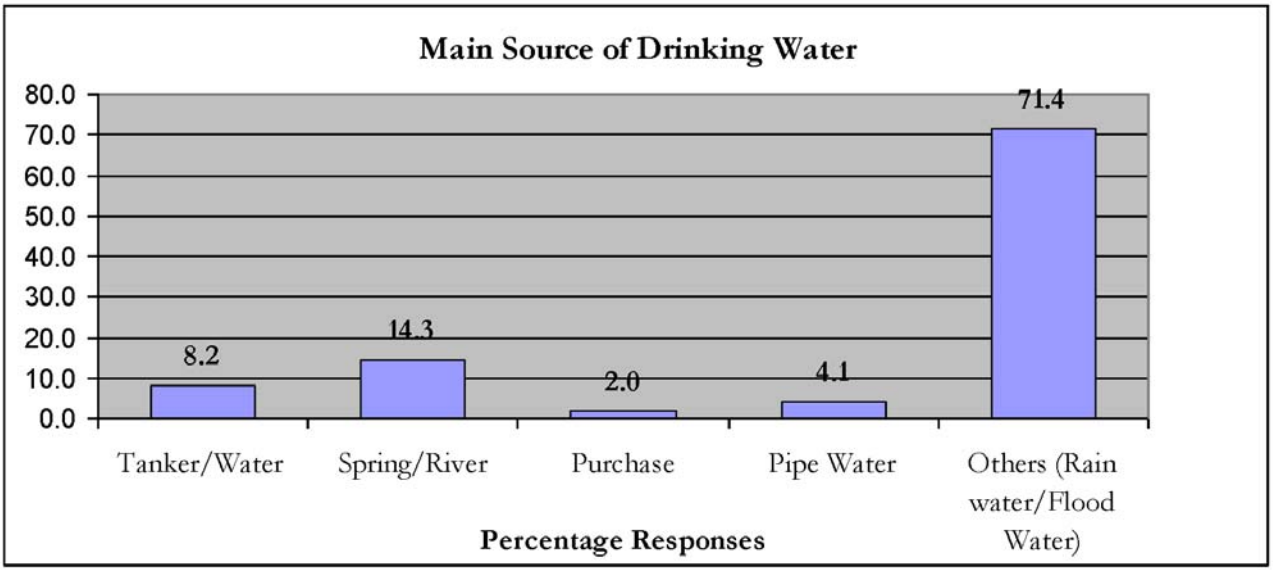


Figure 4 Type of Health Facilities Accessed by Community Members

- Communities reported a range of ailments, particularly diarrhoea, dehydration, and respiratory infections. Other diseases such as scabies and malaria were also reported. In addition, Save the Children's mobile health teams, which are providing health services in the flood-affected areas, reported cases of eye infections, fever, and insect bites in children.

- Floods have severely affected drinking water sources. Community members in 71% of surveyed villages are obtaining drinking water mainly from rain and flood water, while 14% are fetching water from rivers or springs. This greatly increases the risk of waterborne diseases, as the flood waters and rivers and springs are contaminated. Communities stated that they were forced to use contaminated water for drinking purposes because they had no other option.



Swat District

Flood-hit areas of Swat have limited access to health services. A number of health facilities in certain locations, e.g. Beshigram, are completely destroyed. Furthermore, as many areas are cut off from main towns in Swat, 50% of surveyed communities are unable to access health services when needed, while the other 50% can access health facilities only with difficulty. Over half (55%) of communities reported that injured and sick community members were not receiving any medical treatment, with pregnant women in particular facing problems. The most prevalent ailments are diarrhoea, respiratory infections, skin diseases and fever.

In 45% of surveyed communities, the main sources of drinking water were rivers, ponds, or lakes, while 41% were obtaining water from wells. Over 80% of the communities reported water shortages.

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.

Church World Service conducted an average of 200 daily consultations between 6 and 8 August in Tehsil kabal, Charbagh and Matta in Swat district. In Mansehra, the organization has conducted 706 consultations in flood-hit Tehsil Balakot.

Care International is supporting four BHUs in Upper Swat by providing primary health care services through two mobile clinics. A total of 4 499 patients have been treated since the onset of the floods. Furthermore, 500 families were provided with health & hygiene kits (towels, nail cutters, soap, tooth brushes and toothpaste) in districts Nowshera & Charsadda of KPK.

CERD has provided health services to240 people in Nowshera district through a mobile team and has distributed 600 face wash soaps and 250 laundry soaps.

Cordaid is supporting the flood-affected populations of Amnovi, Kuzkana, Shalizai, Malakhel, Sherpur, Dehrai, Demorai and Ranial in district Shangla. The organization conducted 1 486 patient consultations in health facilities in these areas (665 females, 821 males and 311 children). The three priority diseases are acute respiratory infections, diarrhoea and gastritis.

International Medical Corps medical teams are continuing to provide medical and psychosocial services for displaced people in three districts (Peshawar, Charsadda and Nowshera). A total of 861 consultations have been provided to individuals. Acute diarrhoea, acute respiratory infection and skin infections are the most common causes of consultation. The psychosocial teams have identified cases of depression, post-traumatic stress disorders and phobic anxiety. They conducted individual and group sessions for 44 individuals, including children less than 12 years of age.

Johanniter International is supporting Charsadda district through two mobile units. The organization provided health services to 250 patients on 9 August.

Malteser International is providing primary health care services in Islampur BHU, Chetewar CD, and Maragai BHU in Swat district. During the first week of the floods, Malteser organized three medical camps in three transitional camps of Islampur UC.

Médecins du Monde – France (MdM-F) began providing medical care in two union councils in Nowshera District (Misri Banda UC and Mughalki UC) on 8 August. The allocation of places was discussed closely with EDO-H Nowshera (flood response focal point: Dr Kamal). The medical team is providing comprehensive primary health care including reproductive health services (ante-natal, post-natal and family planning), EPI and health education.

On 9 August, MdM provided health services to 266 patients in Misri Banda UC and 360 patients in Mughalki UC. Most of the patients complained of acute respiratory infection, skin diseases and diarrhoea.

Pakistan Red Cross Society, with support of German Red Cross, is providing health services in four BHUs in district Shangla and three BHUs in District Kohistan (Doga, Seo and Razika). In District Nowshera, it is also supporting two mobile health units that will provide health services for two months in the same location.

Pakistan People's health Initiative (PPHI) has provided health support to 5 904 people affected by floods in five districts of Nowshera, Charsadda, Peshawar, Swabi and Mardan.

Save the Children has deployed mobile medical teams in Swat, Buner and DI Khan districts of KPK. In Swat district, the organization is supporting Rural Health Centre Dewalai, Civil Hospital Barikot, BHUs Qamber, Talang, Chuprial, Sher Palam and civil dispensary Rangmohallah. In Buner district, the organization is supporting BHU Nansair which has been damaged by floods. BHUs Korea, Khanano and Dharai are inaccessible as the bridges leading to them have been damaged. In DI Khan, where seven

health facilities are inaccessible, Save the Children's health teams are working in five mobile health units. BHU Mohara is still submerged in water and is not functional. BHU Maddikhel, BHU Larr, BU Maddi, BHU Takwara, THQ Kulachi are also inaccessible.

UNICEF is supporting health teams in six UC of Swat, and has provided services to 701 households. Antenatal care was provided to 97 pregnant women; 37 pregnant women were vaccinated against tetanus and 340 children were vaccinated against measles. UNICEF is providing support to five medical teams in DIKhan in collaboration with EDO Health. These teams have so far assisted 690 people. UNICEF is also supporting specialized paediatric services at DHQ DI Khan.

As of 9 August, **WHO,** with its Health Cluster partners, has distributed 142 cholera kits, 125 health emergency kits, three surgical supply kits, 550 vials of anti snake venom, 5 100 hygiene kits and newborn kits, and 700 clean delivery kits. These kits will cover the needs of around 800 000 people for one month.

WHO is supporting 28 mobile medical teams managed by health partners in KPK. Plans are underway for the establishment of diarrhoeal treatment centres in affected areas.

WHO, UNICEF and UNFPA are working with the Pakistan Gynecologists and Obstetricians Association to identify pregnant and high-risk women in KPK.

Initial rapid assessments and comprehensive health assessments are ongoing in affected areas.

WHO is supporting district authorities and health partners in the emergency water, sanitation and hygiene (WASH) response. Support included the donation of 880 000 water purification tablets, 107 000 sachets of disinfection for turbid water, 6 800 brochures containing hygiene messages, 10 327 bars of soap bars, 20 sets of turbidity meters, 10 chlorimeters with reagents, 750 WHO emergency water treatment guides, and 520 filters. Between 1 and 9 August, 90 water supply supervisors and WASH partners were trained on chlorination, water disinfection techniques, and emergency water treatment.

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