



The floods have made life miserable for millions of displaced people in KPK. Outbreaks of communicable diseases are a threat due to limited access to safe water, and unsanitary living conditions.
Photo by Syed Haider Ali/WHO

Highlights

- Fifty-six out of 74 flood-affected districts in all four provinces shared daily diseases surveillance data for 9 August.
- The total number of health consultations on 9 August from all affected provinces reached 138 291 and from these consultations, there were 15 308 (11%) cases of acute watery diarrhoea.
- Two new alerts of acute watery diarrhoea (AWD) were reported - one from Sra Dheri, district Mardan in Khyber Pakhtunkhwa (KPK) and another from Jamshed Band, Taluka Kingri, district Khairpur in Sindh. Disease Early Warning System (DEWS) teams responded to both alerts.
- The Federal Expanded Programme on Immunization (EPI) has launched an emergency immunization campaign. Between 4 and 10 August, 20 577 were vaccinated against polio, 2 352 children in Punjab province were vaccinated against BCG and another 4 355 were vaccinated against measles.
- In the flood-affected districts of Punjab, 1 920 health facilities including 1 003 mobile teams and 917 static facilities are providing health services to the affected communities.
- Between 1 and 9 August, the Health Cluster conducted 90 training sessions on chlorination and disinfection techniques for health staff and water supply supervisors in Charsadda, Nowshera, Swat and Bunir.
- The United Nations launched the Pakistan Humanitarian Appeal in New York on 11 August. The initial requirements for the health component of the appeal amount to US\$56.2 million for critical life-saving preventive and curative interventions. The total amount of the health component, including subsequent recovery of the country's health system, is expected to reach more than US\$100 million once the results of ongoing assessments are known.



Situation overview and current scope of disaster

Latest government figures indicate that over 14 million people have been affected by the floods. Assessments to gauge humanitarian needs are ongoing. The number of deaths has reached 1 400, with 1 588 people injured. A total of 722 508 houses have been damaged.

It is still difficult to access some areas. According to government reports, 281 bridges and 283 roads in KPK have been damaged. Road links to Upper Swat, Kalam and Kohistan are yet to be restored, while roads to Gilgit have been cut off due to damaged bridges and landslides. In Baluchistan, 52 roads and 20 bridges have been damaged by the floods.

The Pakistan Meteorological Department reports that monsoon rains of weak to moderate intensity persist in the north of the country. Scattered rain and thundershowers are expected across Punjab and KPK. Forecasts show that isolated rain and thundershowers will persist over northern parts of Sindh.

At midday today, national media reported an alarming rise in water spill through breaches that developed in Bunder wall along the River Indus, posing a serious threat of flooding in Sukkur district. Meanwhile, in other areas abutting the River Indus, the floodtides have wreaked massive devastation, leaving many villages inundated.

Health situation/ alerts and outbreak

Fifty-six out of 62 flood affected districts in all four provinces shared daily diseases surveillance data for 9 August. Two new alerts of AWD were reported - one from Sra Dheri, district Mardan in Khyber Pakhtunkhwa and another from Jamshed Band, Taluka Kingri, district Khairpur in Sindh. DEWS teams responded to both alerts.

Alert, Response and follow-up:

- In Mardan, an alert for suspected AWD was reported from Sra Dheri on 9 August. Active surveillance was conducted in the village and no further suspected cases were identified. A stool sample was collected and sent to NIH for further laboratory testing and confirmation.
- In Khairpur, an AWD alert was reported from Jamshed Band, Taluka Kingri district Khairpur in Sindh. A team of physicians from Sindh Institute of Urological Transplant (SIUT) is managing these cases. In Pir Baba (Buner), Pachakalay civil hospital is maintaining a line list for all diarrhoea cases and conducting active surveillance for AWD. No new case has been reported from Pachakalay civil hospital.
- In Gul Abad district Swat, the AWD patient admitted to the Saidu Group of Teaching Hospital (SGTH), Swat was treated and discharged from the hospital. The village is being monitored for other cases of AWD. Health Cluster partners are conducting health and hygiene promotion activities, distributing soap, and helping households chlorinate their water supplies. Health Cluster partners are also planning to chlorinate the water source and install a new hand pump.
- In Chandan Ghari (Peshawar), a mobile team from EDO Health Peshawar visited the village and held consultations for 437 patients. From these consultations, 39 patients were diagnosed with acute diarrhoea without dehydration. Lady health workers are conducting hygiene promotion and health education sessions and distributing water purification tablets in the area again. WHO is supporting EDO- Health by donating water purification tablets and soap.

Immunization

- The Federal Expanded Programme on Immunization (EPI), together with WHO, UNICEF and health partners, has launched an emergency immunization campaign in camps and among the displaced population. All children under five years of age should receive one dose of polio vaccine; children between six months and five years old should receive one dose of measles vaccine along with a vitamin A capsule.
- Between 4 and 10 August, immunization activities were conducted in the districts of D G Khan, Rajanpur, M/Garh, Layyah, Mianwali, Sargodha, R Y Khan in Punjab Province. So far, 2 352 children have been vaccinated against BCG, 20 577 have been vaccinated against polio, and 4 355 have been vaccinated against measles.

- According to Malteser International, many areas in Lower Swat district are still inaccessible. The organization fears that there are pockets of communities that have no access to health facilities.

Khyber Pakhtunkhwa (KPK)

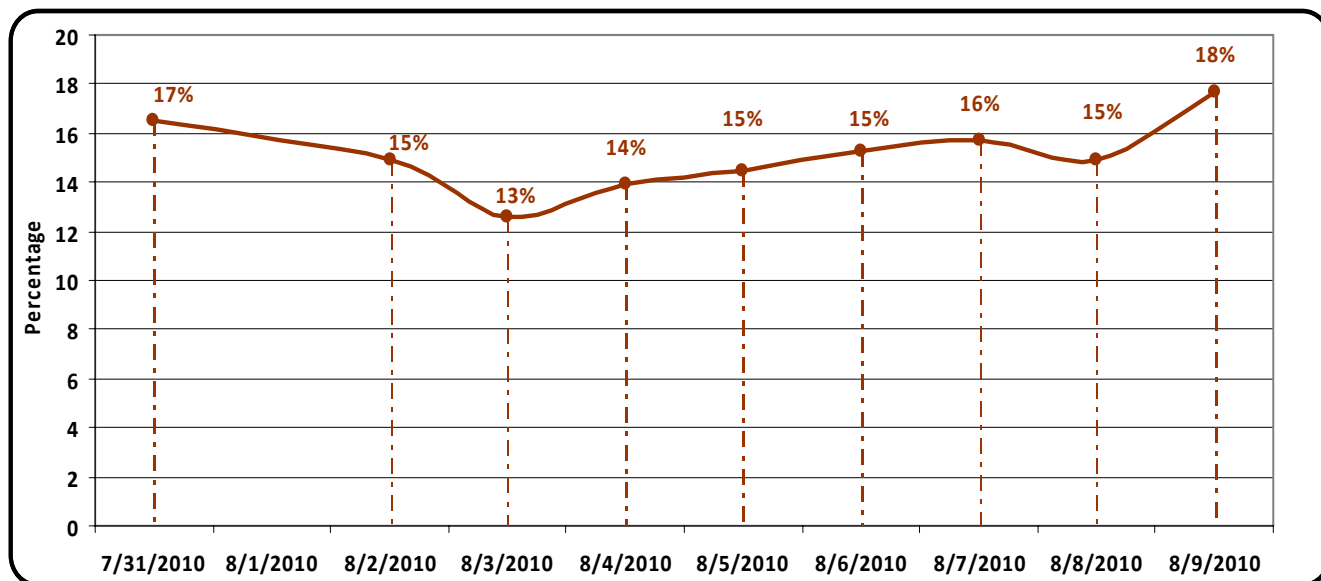
- In KPK, 128 health teams and static health facilities from 10 flood-affected districts shared daily reports. A total of 22 798 patient consultations were reported: this is high compared to the previous day.

Distribution of daily patient visits by priority diseases, in the flood-affected districts of KPK.

Diseases	31-Jul	2-Aug	3-Aug	4-Aug	5-Aug	6-Aug	7-Aug	8-Aug	9-Aug	Total
Acute watery diarrhoea	337	2 221	2 277	897	4 671	3 900	4 263	1 939	4 027	24 532
Acute jaundice syndrome		9		1	5	1	15		9	40
Bloody diarrhoea	59	49	70	54	113	119	90	95	116	765
Injuries				71	111	477	298	38	201	1 196
Lower respiratory tract infection	34	179	109	221	403	248	210	200	424	2 028
Suspected malaria		28	75	222	54	162	85	46	198	870
Others	1 056	7 956	8 660	3 157	14 122	12 552	12 767	6 645	10 742	77 657
Skin infections	150	2 647	4 270	710	7 325	4723	5 083	2 015	3 076	29 999
Unexplained fever	125	945	1122	167	1 842	179	420	402	362	5 564
URTI	276	901	1528	944	3548	3146	3 827	1 604	3 643	19 417
Total	2037	14 935	18 111	6 444	32194	25 507	27 058	12 984	22 798	162 068

Acute diarrhoea

The daily trend of acute diarrhoea in the flood-affected districts shows numbers are gradually increasing. A higher proportion of diarrhoea cases is seen in Swat, Peshawar, Charsadda, Mardan and Nowshera as compared to the other districts. Urgent action is needed to address the water, sanitation and hygiene (WASH) situation in these districts if the risk of waterborne disease outbreaks is to be averted. The figure below reflects the daily trend of acute diarrhoea in the flood-affected districts of KPK over the last six days.



Punjab province

- Daily disease reports are shared from 26 flood-affected districts in Punjab. A total of 1 920 health facilities including 1 003 mobile teams and 917 static facilities are providing health services to the affected communities in these districts.
- On 9 August, a total of 109 822 patient consultations were reported. Skin diseases, with 19% of total patient visits, was the leading cause of morbidity. Acute watery diarrhoea accounted for 9% of patient consultations; a high number of cases of diarrhoea was reported from Mianwali, Muzafargarh, Sargodha and Khushab.
- There were 66 dog bites and 39 snake bites reported from the flood-affected districts.

Distribution of patient visits by district and by disease in Punjab on 9 August 2010

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	1468	0	0	0	0	997	3 408	7 095
Lahore	244	0	80	43	0	3	0	118	15	503
Layyah	2 549	606	3 646	988	1 217	6	17	493	11489	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	7920	0	0	0	0	3 379	6 922	23 838
Muzafargarh	1 144	110	1 670	9 191	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	2597	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	3 416	0	0	0	0	1 215	5 259	14 446
TOTAL	13 987	3 376	20 810	12 725	1 217	66	39	9 659	47 943	109 822

Baluchistan Province

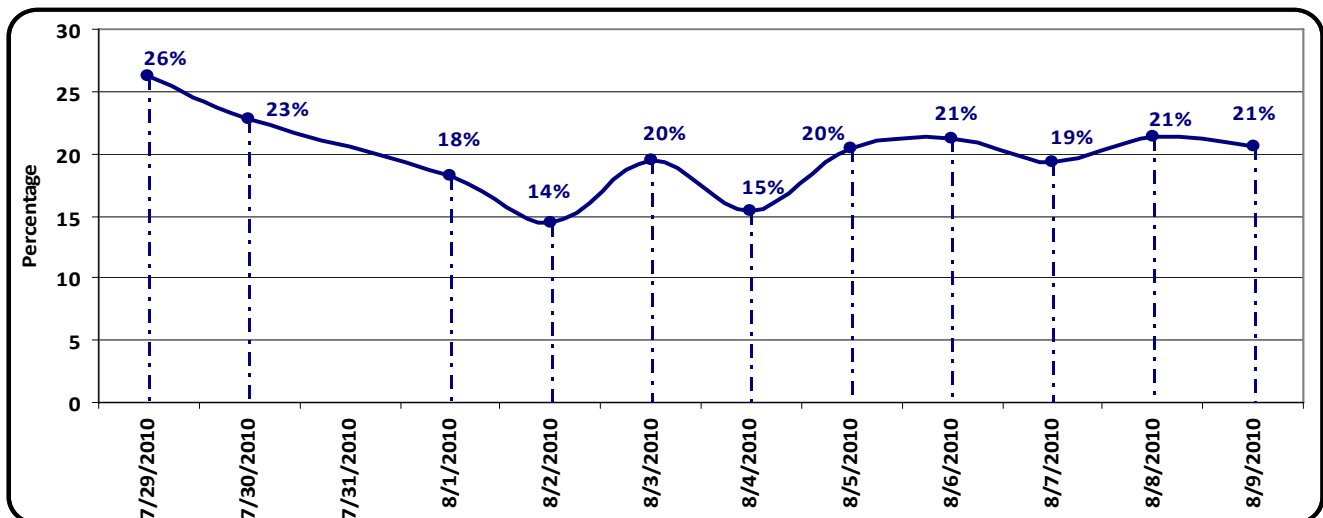
- UN-Habitat's assessment shows that three health facilities (HF) in Sibi district were destroyed and another 16 were damaged (9 in Sibi, 1 in Naseerabad, 6 in Barkhan).
- Four flood-affected districts in Baluchistan shared daily disease reports on 9 August. A total of 569 patient visits were reported. From these consultations, there were 117 (21%) cases of diarrhoea, 104 (18%) of upper respiratory tract infection and 77 (14%) of scabies.

Distribution of daily consultations by disease in flood-affected districts of Baluchistan

Diseases/Conditions	29-Jul	30-Jul	1-Aug	2-Aug	3-Aug	4-Aug	5-Aug	6-Aug	7-Aug	8-Aug	9-Aug	Total
Acute watery diarrhoea	56	52	81	42	113	32	84	104	235	66	117	982
Bloody diarrhoea	32	11	36	14	53	15	32	26	29	16	33	297
Clinical malaria	46	55	130	55	124	28	61	78	228	51	50	906
URTI	0	23	43	73	119	34	51	59	208	54	104	768
LRTI	0	0	0	0	11	0	2	7	6	0	14	40
Unexplained fever	2	10	42	15	43	10	6	19	57	5	51	260
Scabies	45	28	72	57	31	36	53	56	284	65	77	804
Sunstroke	0	10	0	0	0	0	0	0	0	0	0	10
Snake bite	5	1	4	5	1	2	2	9	6	3	2	40
E.N.T Cases	27	16	27	23	32	30	42	25	54	33	16	325
Eye Infection	0	22	10	7	27	21	28	25	62	11	2	215
Dog Bite	0	0	0	0	0	0	6	2	6	4	1	19
Others	0	0	0	0	24	0	45	79	40	0	102	290
Total	213	228	445	291	578	208	412	489	1215	308	569	4 956

- Between 29 July and 9 August, 40 snake bites were reported from district Naseerabad and Jaffarabad.
- A high proportion of acute watery diarrhoea has been reported in district Naseerabad. The cases are from different places; no clustering is reported by health care providers. Patients with diarrhoea who visited the health facilities and mobile teams presented mild symptoms. Health hygiene education sessions are being conducted involving lady health workers, and water purification tablets have been distributed in the affected community.
- The graph below reflects the daily trend of acute diarrhoea in flood-affected districts of Baluchistan.

Daily trend of acute diarrhea in flood-affected districts, Baluchistan



Sindh Province

- Daily disease surveillance reports were received from 296 health facilities (146 mobile teams and 150 fixed facilities) in 16 flood affected-districts.
- A total of 12 138 patient visits were recorded from fixed facilities and mobile medical camps. ARI was the leading cause of consultation, with 17% of total visits, followed by skin disease (14%) and acute watery diarrhoea (12%).
- A high number of diarrhoea cases are being reported from districts Khairpur, Dadu, Gotki and Larkana. Strong WASH interventions are highly required in these districts.
- An alert from Khairpur district was received and responded to. Lady health workers are conducting health education activities in these districts.
- Thirteen snake bites were reported.

Distribution of patient visits in the flood affected districts by disease Sindh 9-8-2010

District	AWD	BD	ARI	Malaria	Skin diseases	Snake Bite	Others	Total
Shikarpur	47	7	214	321	48	1	262	900
Sukkur	55	31	92	86	88	0	283	635
Larkana	116	20	159	132	361	0	925	1 713
Khairpur	291	0	228	115	104	0	370	1 108
Kashmore	27	45	203	108	76	0	227	686
Ghotki	135	12	76	254	169	6	71	723
N. feroze	186	33	111	112	207	0	268	917
Dadu	203	67	326	46	97	0	302	1 041
Jamshoro	73	28	94	36	64	1	52	348
Benazeerabad	149	25	130	56	284	0	254	898
Matairi	20	4	49	33	44	0	72	222
Hyderabad	15	0	17	0	0	0	2	34
T. M. Khan	25	7	18	16	46	0	7	119
Thatta	60	0	103	113	97	0	204	577
Badin	103	43	196	0	67	3	1 797	2 209
Tharparker	0	0	0	0	0	2	6	8
Total	1505	322	2 016	1 428	1 752	13	5 102	12 138

Health cluster response

Care International is supporting four basic health units (BHUs) in Upper Swat (BHU Bahrain, BHU Tirat, BHU Miadem & BHU Chail). The organization is providing daily primary health care (PHC) services through two mobile clinics in Upper Swat. Since the start of floods, a total of 4 499 patients have been treated. In addition, 500 families were provided health & hygiene kits in district Nowshera & Charsada.

Church World Service conducted 1 048 consultations in Tehsil Balakot, one of the badly affected areas in Mansehra. Of these consultations, 28 were for antenatal care; three for post-natal care; and 135 for children under five years old. In addition, a mobile clinic in the remote areas of Tehsil Balakot has provided essential medicine and consultations to 1 048 patients .

Helping Hands for Relief and Development (HHRD) has conducted several medical camps over the past few days in flood-affected areas. Around 5 000 patients were treated in medical camps in Charsadda, Dir and Mianwali districts. On 10 August, HHRD launched its medical camps in Dera Ghazi Khan, Muzaffar Garh and Nawab Shah.

Medical Emergency Relief International (MERLIN) is continuing to provide health services to flood-affected communities in Swat, Buner and Nowshera districts. Today, a total of 6 852 consultations were conducted. Merlin is providing PHC services to flood-affected communities in three districts through 27 static clinics (11 in Swat, 10 in Buner, 6 Jalozai) and 14 Mobile teams (6 in Swat, 3 in Buner and 5 in Nowshera). Merlin plans to increase the number of mobile teams in Swat from 6 to 9, weather permitting. Five of Merlin's mobile teams were already airlifted to Upper Swat last week and are providing health services to affected communities.

International Medical Corps mobile medical teams provided medical treatments to 748 individuals in Peshawar, Charsadda, and Nowshera districts on 10 August.

UNFPA provides emergency reproductive health/maternal/newborn care through seven fully equipped and staffed mobile service units (MSUs) (one in Nowshera, KPK, three in Muzaffargarh, Punjab, and three in Jacobabad and Thatha in Sindh). UNFPA has provided reproductive health medicines and a total of 19 00 women's hygiene kits, 800 newborn kits and 1 531 clean delivery kits to ten flood-affected districts in KPK, Punjab and Sindh provinces.

On 10 August, UNFPA treated a total of 502 patients. This number includes 16 deliveries and 110 ante- and 21 post-natal consultations. Four patients were given post-abortion care. Yesterday UNFPA distributed a total of 68 hygiene kits, 13 newborn kits, and 60 inter agency clean delivery kits.

UNICEF-supported health teams in six union councils (UCs) of Swat provided services to 1 759 households on 10 August. So far, 8 212 households have received 12 230 sachets of oral rehydration salts, 8 256 strips of aqua tablets, 547 insecticide-treated nets, 7 240 jerry cans and 8 000 water purification tablets. Antenatal care was provided to 242 pregnant women. A total of 37 pregnant women were vaccinated against tetanus, and 340 children were vaccinated against measles. The teams identified 1 131 defaulter children who were referred for vaccination. In addition, 779 children between two and five years old received de-worming, and 894 children between six and 59 months old were given multi micronutrient sachets. More than 969 beneficiaries have been reached with health & hygiene related messages.

In Nowshera, three mobile teams provided outpatient consultations to 901 patients through visits to Nowshera Kalan, Jaba Daudzai and displaced people residing in schools at Amangarh. In addition, 16 pregnant women were provided with ante-natal care and 14 received a post-natal check up. So far, 422 beneficiaries have received health education messages on the prevention of diarrhea, basic hygiene, and the importance of breastfeeding during emergencies.

In Charsadda, 255 patients were provided with health services through a mobile team visiting Rajjar Sheikhabad. The team provided ante-natal care for 10 patients and post-natal care to another six. A total of 690 people have received PHC through these mobile teams. UNICEF is also supporting specialized paediatric services at DHQ D.I. Khan.

Heavy rainfall in Hangu over the last two days has affected many villages in UC Khan Bari, Togh Sarai, Raesan, Kach, Kotki, and Mohammad Khwaja. A UNICEF- supported partner has distributed 200 hygiene kits in UC Khan Bari and Kotki.

UNICEF made a blanket distribution of supplementary food in flood-affected areas of lower Dir (at CHC Khazana) for 70 children of 6-59 months old and 77 women. Another 283 people, including 214 mothers, received health education messages on hygiene and breastfeeding.

On 11 August, **WHO** distributed 11 health emergency kits to the IMC mobile team in Peshawar, EDO Health in Upper Dir, EDO Health in Lower Dir, and EDO in Attock Punjab. Moreover, 10 emergency health kits and 6 diarrhoeal kits were received by WHO from the Italian Government.

Between 1 and 9 August, WHO and health partners conducted 90 training sessions on chlorination and disinfection techniques for health staff and water supply supervisors in Charsadda, Nowshera, Swat and Bunir.

In the Nutrition Cluster, WHO is working closely with UNICEF to provide technical support in the management of therapeutic and supplementary feeding at health facilities for severely malnourished children. WHO is also helping promote appropriate infant and young child feeding practices, set up a nutrition surveillance system, and strengthen the existing nutrition information system.

WHO will support a rapid nutritional needs assessment as well as the treatment and care of severely malnourished children under five years old. It will also support the community and facility-based management of acute malnutrition and the training of health care providers and community workers on infant feeding practices in emergencies. Lastly, it will help establish nutrition information management and nutrition surveillance systems.

Pachakalay civil hospital has set up a diarrhoea treatment centre with isolation wards. Merlin has provided human resources while WHO is supplying cholera kits. Health staff have been trained on health and hygiene promotion and the prevention of diarrhoea. A total of 120 target families were identified; two teams are visiting the target community each day to conduct health and hygiene sessions and identify new cases of diarrhoea. Water samples were tested for bacteriological contamination. Tehsil Municipal Authority (TMA) has provided an alternative water supply from a nearby protected spring and has installed three water tanks for the community. Hygiene kits, water purification sachets and soaps were distributed, and hygiene promotion messages were disseminated. WHO provided 10 000 aqua tablets, 1 000 soaps and 30 kg high test hypochlorite (HTH).

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