HEALTH CLUSTER RESPONSE PLAN

Life saving Health Response in Khyber Pakhtunkhwa and FATA

Cluster lead agency	World Health Organization
Implementing agencies	WHO, UNICEF, UNFPA, DoH KP and FATA and National and International NGOs partners
Cluster objectives	The overall objective of the Health Cluster Response Plan is ***to improve the health conditions of IDPs and hosting population in hosting districts of Kohat, DI Khan, Tank and Hangu of KPK and IDPs in Jalozai, New Durrani and Togh Saray camps, supporting the returning population of Kurram agency through strengthening, provision of/and maintaining essential life saving health service interventions reducing morbidity and mortality.*** **Specific objectives:** • *To ensure provision of essential life saving PHC services (including Maternal New-born and Child Health /Reproductive health, mental health and psycho-social support) at community level and in facilities for all crisis affected population especially for women and children, elderly, and people with disabilities* • *To address the emerging public health threats in a timely and appropriate manner by implementing and expanding the Disease Early Warning System (DEWS) and response to all the affected areas of displacements and camps.* • *To ensure the delivery of the health response in a coordinated manner and according to SPHERE, Global Health Cluster and national standards.*
Beneficiaries/ Population caseload	The population caseload include: (1). IDPs and immediate hosting population in host areas of Kohat, Hangu, DI Khan and Tank, (2): IDPs in Jalozai, Togh Saray and New Durrani camp, (3) returning population of Kurram agency including both conflict and sectarian IDPs. **Population caseload scenarios:** **<u>In Camps IDPs:</u>** Jalozai, Nowshera: 6,000+5000 new influx from Khyber Agency: = 11,000 families Togh Sari, Hangu: = 1,200 families New Durrani, Kurram: = 2,500 families **Total 14,700 families = 102,900 individuals** **<u>Off Camp IDPs + host families:</u>** DI Khan: 28,759 families Tank: 11,133 families Kohat: 24,950 families Hangu: 2375 families **Total: 67217 families+50,000 host families (approx.) = 117217 families = 820519 individuals** **<u>During return process:</u>** Total: 93,525 families= 654,675 individuals **<u>Relief after return:</u>(immediate relief after return till start of ER activities)** 141,444 families = 990,108 **Total target population: 455,086 families = 3,185,602 individuals**

Demographic estimation for health in emergencies:

	Context Population	Programming Groups		*%*
Total Population	**3,185,602**			
Male (52%)	**1,656,513**			**52%**
Female (48%)	1,529,089	782,894		**48%**
child bearing age (48.8% of female)		746,195	48.8%	
	3,185,602			100%
Population below 15 years	**1,382,551**	673,755		43.4%
Newborns 7% of total Pop under 15years		237,327	7.45%	
Children (Below 5 years excluding newborns)		471,469	14.8%	
Population 15 - 64 years	**1,691,555**	1,573,687		53.1%
Pregnant Women 3.7 % of 15 - 64 population		117,867	3.7%	
Elderly (Above 65 years)	**111,496**			3.5%
	3,185,602	3,029,508		100%

Funds requested	**20 million US$**
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Needs analysis

In the aftermath of the influx of IDPs in Khyber Pakhtunkhwa and FATA, Health Cluster placed great emphasis in ensuring that risks related to lack of safe water, proper sanitation and hygiene are recognized early and properly managed, so as to ensure the control of communicable diseases, with special focus on the vulnerable IDPs camps, hosting districts and the devastated returnee areas.

The health indicators of the FATA and Khyber Pakhtunkhwa are poor and significantly low (IMR, 63/1000 live births and MMR 275/100,000 live births respectively). This is mainly because of the low levels of antenatal care (51%) and births attended by a skilled birth attendant (38%). Immunization rates in KPK are also below that of Pakistan's (47%).

Various factors put the health of the people in affected areas (both with displaced or locals still living in the area) at risk. Displacement and sudden temporary relocation inside FATA leads to poorer living conditions, increased risk of communicable diseases and epidemic outbreaks, malnutrition, physical (mostly elderly and pregnant women) and mental stress due to insecurity, exposure to extreme weather conditions, and inadequate health care services.

Influxes of population due to displacement have further increased the burden on the already under-resourced health care system of the Southern districts of KP including Kohat, Hangu, Tank and DI Khan as well as in Kurram

Agency. If a timely assistance is not provided, the mortality rates are likely to increase, mainly due to the lack of the timely access to the health care, especially for trauma and infectious diseases. There are evident gaps in the capacity of the health care providers in handling an emergency situation. The provision of comprehensive Primary Health Care Services delivery is urgently required for the returnees and displaced populations of the affected areas of KP and FATA. There is also a need to support the supply chain mechanism of the essential medicines to the target population. This includes both provision of medicines in adequate quantity and emergency infrastructural support to ensure necessary storage practices. Special attention and assistance needs to be given to the vulnerable groups including elderly, pregnant women, disabled etc. Large numbers of IDPs are still staying in 3 camps i.e. Jalozai (Nowshera), Togh Sarai (Hangu) and New Durrani Camp (Kurram) while many are still in host communities of DI Khan, Tank, Kohat and Hangu.

According to assessment of WHO essential medicines team field visits in the affected areas, the situation of health facilities is far behind from standards in terms stock outs for months in the year, no record is maintained, no proper storage practices visible, irrational prescribing observed very often and irrational dispensing. Health facilities supposed to receive stock of essential medicines every two months but the stock lasts nearly in one month and the next supply takes 30 days (Lead time) thereby resulting 60% gap in the availability of essential medicines. It is further evident from the standard indent produced at the health facilities for the demand of supplies that out of 15 key essential medicines only 4 are being supplied.

The already resource constraint DHQ hospital have increased Load of IDPs especially on specialized paediatric care and there is a need to strengthen these hospitals through filling of HR, supply , Equipment and capacity gaps.

Preventive programs specially Lady Health Workers Program, MNCH Program and EPI are the most affected. Due to security situation and restriction on movement of females, community health workers (LHWs) were not able to perform their duties optimally. This situation was compounded by changes resulting from the 18th amendment and funding issues, currently the program is not fully functional in these districts. There is a need to revitalize LHW Program so that LHWs are able to provide PHC services at the doorstep of the affected communities. Similarly Community Mid wives of MNCH program need revitalization and strengthening through provision of Midwifery kits other relevant supplies and refresher trainings.

Under the immunization coverage during the displacement, most vaccination services and activities were interrupted in the government-run health facilities due to weak or non-functional facilities; unavailability of electricity or fuel for generators; movement restrictions in insecure areas (specially Tank, DI Khan and Hangu) affecting the distribution and delivery of vaccines; and shortage or absenteeism of health facility or field staff.

Water quality monitoring and control is thus of paramount importance in controlling the spread of water borne diseases. Water quality monitoring and treatment will be conducted to avert waterborne diseases and health education and hygiene campaigns will be conducted to educate the communities on hygiene and safe drinking water and effective health seeking behaviour. In addition, viable technical strategies for waste disposal will be promoted to ensure patient safety and local environmental health.

Health Cluster Partners under the leadership of WHO work in partnership with government are focusing on Primary Health Care (PHC) service delivery, early detection and response to outbreaks, rehabilitation of health facilities with appropriate water supply and latrines, warehousing of contingency medical supplies and equipment, referral system strengthening, and provision of life-saving drugs. A standardized package of PHC service delivery has been developed and cluster partners are helping existing public healthcare facilities to cater for the health needs of most vulnerable population including women, children and elderly. The health cluster partners are contracted for provision of PHC services where government resources are inadequate.

From the start of the displacement crisis, WHO, UNICEF and UNFPA have been supplying essential medicines through the Health Directorate and Agency Surgeon to the target population of affected areas. It has kept its vision of providing timely relief in the form of essential medicines and medical supplies, monitoring rational use of medicines, providing customized kits, forecasting medicines requirement and preparing contingency plans

providing technical support in managing drug warehouses and training support to the Department of Health and other health partners in strengthening of drug supply chains.

RAPID ASEESSMENT/NEED & GAPS ANALYSIS:

A rapid assessment was conducted by WHO field teams in the IDP hosting health facilities (UC's were identified by IVAP) in DI Khan, Tank, Hangu and Kohat from 31-01-12 till 01-02-12.

Objectives for conducting an assessment:

- To assess the overburdened health facilities in selected union councils as identified by OCHA/ IVAP in the four IDP hosting districts (DI Khan, Tank, Hangu and Kohat).
- To assess the health service delivery network in the districts, to collect, compile and analyze as much information as possible to identify gaps in terms of provision of services, disease trends, human resource, equipment, essential drugs and referral services.
- Coverage and needs in respect to the provision of adequate and appropriate health care services in the IDP hosting areas.

Methodology:

The pre-designed assessment tool was used which consists of closed- ended questions regarding facility information, services delivery, staffing positions, equipment and supplies and physical infrastructure etc.
9 teams were deployed in the four districts which consisted of public health physicians, Surveillance Officers, Environmental Health Engineers and Pharmacists.

RESULTS:

A total of 65 public health facilities were assessed in four districts of KP. The breakdown of types of health facilities assessed is given below:

Type of health facility	Assessed
District Head Quarters Hospital	3
Civil Hospitals	3
Tehsil Head Quarters Hospital	3
Rural Health Centers	7
Basic Health Units	46
Civil Dispensaries	3
Total	**65**

1. Primary Health Care:

Overall Primary health care (PHC) services delivered in the four targeted districts in for IDPs in KP are poor. This is coupled by the fact that first referral health facilities as well lack the very essential services required to improve and promote the health of groups at risk such as mothers and children.
Twelve (12) facilities are available to provide PHC (three RHCs) , primary (three THQs) and secondary referral care (three DHQs) and three civil hospitals, regardless the functionality and quality of MNCH services.

Essential MNCH services that can contribute dramatically in reducing maternal, newborn and child mortality and morbidity are: Integrated Management ofNewborn and Childhood Illnesses (IMNCI) addressing the known five killers of under five children, Essential newborn Care (ENC) and Emergency Obstetric Care (EmOC). RHCs and THQs are expected to provide Basic EmOC, while district hospitals and higher levels are expected to provide Comprehensive EmOC.

With above background, examining the current situation of PHC/MNCH services in the four IDP districts compared to the same services provided in 2009/10 we can obviously recognize that service delivery is deteriorating and at the best is stagnant despite the increased number and influx of IDPs in the area.

As per current rapid assessment results, Primary health care services (PHC) such as EPI, family planning, maternal care during pregnancy and after giving birth (antenatal and postnatal) as well as normal delivery are inadequate moreover have deteriorated from 53%, 77%, 79% and 89% respectively in 2009/10 to 44%, 64%, 77% and 81% in February 2012.

Overall basic nutrition services within the essential PHC package is extremely low, but this is even worsened, where growth monitoring of under five children to early detect malnutrition, counselling on infant and young child feeding as well as micronutrient supplementation have also decreased during same period from 21%, 31% ND 12% respectively to 13%, 21% and 6%.

Addressing major killers of under five through IMNCI (please refer to DEWS report for prevalent diseases), is at risk where facilities providing IMNCI decreased from 19% (apparently very weak) to 6%.

According to the total population in the four districts (336,269) it's required to have only one Comprehensive EmOC (1:500,000 population) and three Basic EmOC (4:500,000 population), however none of these facilities is capable of providing Basic EmOC or Comprehensive EmOC as there are only two obstetricians, no anaesthetist, no blood bank, none of the anti-convulsions, oxytocins, parental antibiotics part from benzyl penicillin.

Two facilities perform caesarean sections; however it is not clear how could it be performed in the absence of the mentioned functions (blood transfusion and anaesthesia) along with deficient supplies.

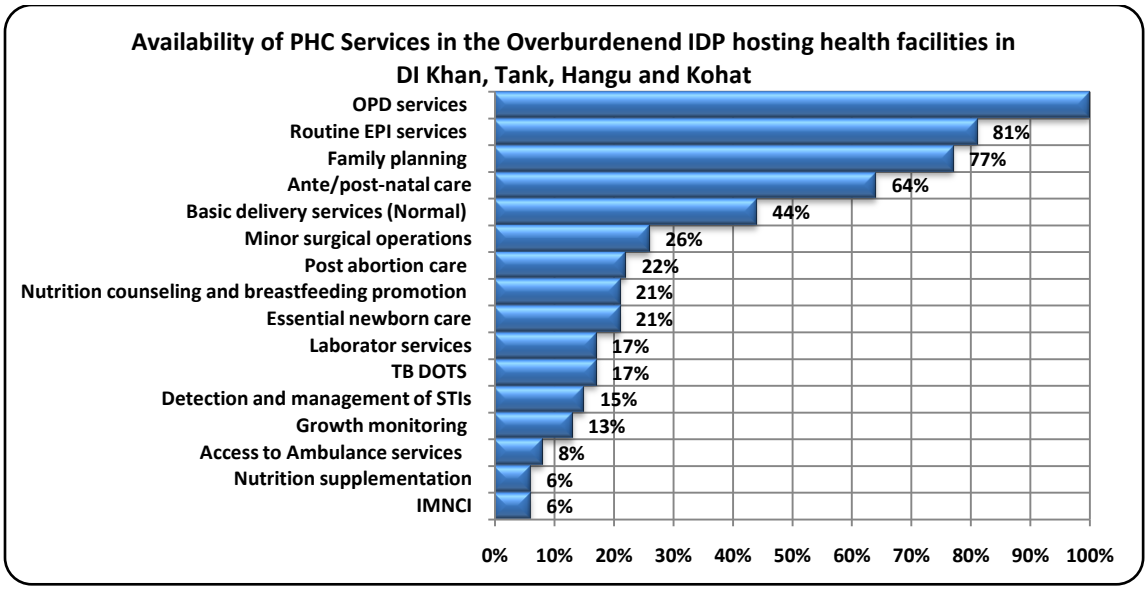
Family planning services is the best of the maternal and RH package compared to other components. There is slight improvement in family planning services in these health facilities. Over all 76% first level health facilities, while all Secondary levels Health Facilities are providing family planning services. Lowest services were found in Tank while highest in Kohat.

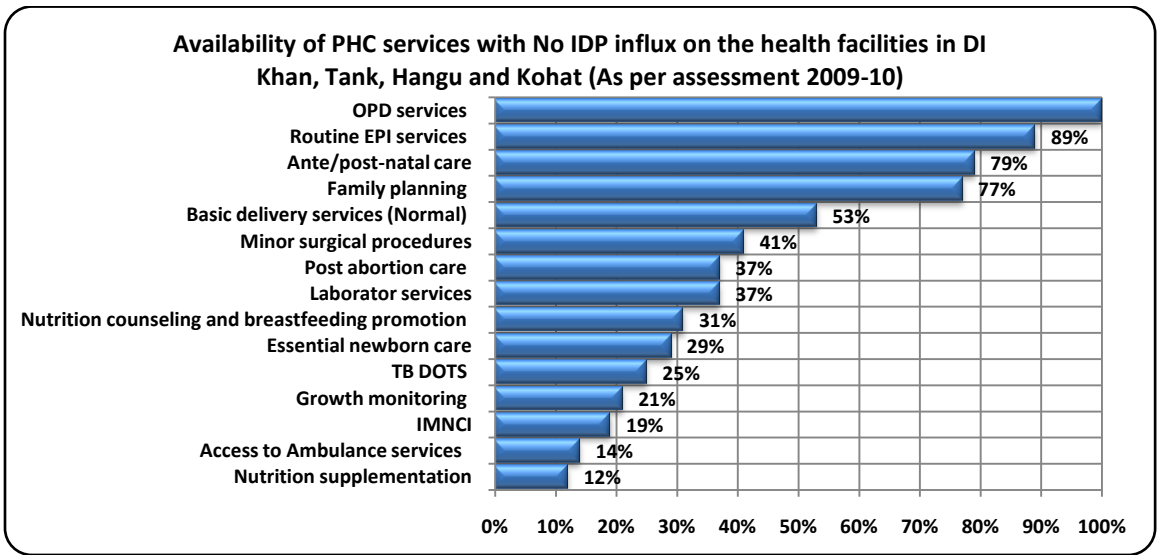
Ambulances that facilitate referral care in emergency cases are not better than above indicators. It's reduced from 14% in 2009/10 to 8% 2012.

Obviously under lying causes remain the same: inadequate human resources and distribution of services. Essential human resource for health such as gynaecologists (two), Paediatrician (one), female medical doctors (two), lady health visitors (Six) and LHWs (37) are very scarce.

Overall we can summarize that PHC including MNCH services in the four IDPs districts are compromised by scarcity, quality and availability of human resources. Unless intensive interventions and commitment of partners little progress will be witnessed to address the needs of IDPs and reduce maternal and child mortality.

The first below graph shows the availability of PHC services delivery in the health facilities with IDP influx and the other graph shows the PHC services delivered in rest of the health facilities (As per assessment conducted by WHO in 2009-10) where there is no IDP influx.





After comparison of the above two graphs it is quite evident that the health facilities which has IDP influx are overburdened and lack of resources including unavailability of qualified HR, lack of services, lack of equipment and supplies are the major factors which leads to the overburdening of these health facilities in the IDP hosting health facilities.

If we compare the data from 2009, there is very little improvement in the services available in these health facilities. In Kohat 88% HF providing ante natal and post natal care services which was 90 % during 2010. 72% HF are providing services for Basic delivery services while 70% were providing in 2010. Same figure are from DI Khan where 86% HF providing Ante natal providing services as compare to 53% in 2010 while 50% providing delivery services as compare to 55% in 2010. The point to be noted here is that only 61% HF in Kohat and 22% of HF in D I khan have sterilization equipment. Post abortion care services is an important component in the reducing the morbidity and mortality. This area is still neglected. In Kohat 22% HF (80% inn 2010) D I Khan 36% (26% inn 2010) and in Tank 0 % (0% in 2010). This is of great concerned as most of the health facilities are not providing Post Abortion care. The other important area is the indoor facilities and none of the FLCF in three districts are providing In door facilities.

There are very week referral linkages between first level and second level Health facilities. The Second delay is very much obvious and only 10% HF in Kohat have ambulance services while in D I Khan, this is only 5 %. This is an important factor playing in the increase maternal, neonatal and child mortality.

There is not much difference in newborn care and child health care as compare to maternal care services. There is marked decrease in Essential Newborn care in Kohat which in now 16% HF are providing ENC as compare to 50% in 2010. In D I Khan 18% HF are providing ENC (24% in 2010) while in Tank none of the HF is providing ENC which is of very serious concern. Exclusive breast feeding play vital role in reduction of neonatal and infant mortality but this component is also ignored. In Kohat 16% of HF (80% in 2010) are providing EBF counselling while in D I Khan and Tank 22% (8% inn 2010) and 0 % (0% in 2010) HF are providing counselling services respectively.

IMNCI strategy is the key activity in the reduction of child mortality and morbidity. The situation is very serious on this component. Only 11% HF (compare to 40% in 2010) in Kohat are providing IMNCI services while in DI Khan none of the HF is providing IMNCI services. Same figure was noted in 2010. It means nothing was done on this important component which is the key strategy for the reduction of Child hood mortality. The Ambu bags are vital equipment in the resuscitation of new born and children. The shocking information is that only 13% HF in DI Khan and 27% and 25% HF in Kohat and Tank have the Ambu bags in HF respectively.

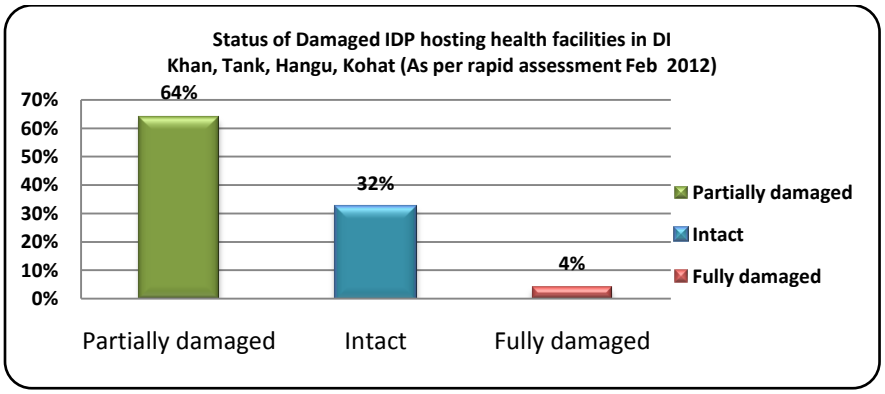
EPI services are available but not on 100% HF which should be the case. Routine EPI is available on 88% HF (100% in 2010) in Kohat, 68% HF (61% in 2010) in D I Khan and 75% HF (52% in 2010) in Tank.

Status of ImmunizationN=65							
	Type of HF	Number	Routine EPI Services Available	Refrigerator	Cold Boxes	Vaccine Carrier	Ice Packs
DI Khan	FLHF	22	14	15	14	14	15
	SLHF	4	4	4	4	4	4
Hangu	FLHF	9	8	7	7	6	7
	SLHF	1	1	1	1	1	1
Kohat	FLHF	18	17	15	15	16	17
	SLHF	6	6	5	5	5	5
Tank	FLHF	4	3	2	2	2	2
	SLHF	1	1	1	1	1	1
Total		65	54	50	49	49	52

There are neither sterile facilities for safe deliveries nor skilled birth attendants available round the clock at these health centres. The availability of Human resource is another big issue. The gender of the health provider is another question; very few BHUs and RHCs have female health staff to cater to women clients. Majority of the Health Facilities were unfortunate to have a doctor posted; instead a dispenser or a vaccinator to be the professional in charge of the facility. The security situation in certain areas makes many BHUs sites unsafe for work. Female ration of health staff working at HF level are considerable low in these four districts.
There are only 2 gynaecologists in 4 districts while no female medical officers are present in RHCs. The female medical officers are concentrated in DHQ level (10 WMO) while on 4 WMO are posted in 3 THQ. LHVs are providing Antenatal, natal and post natal care in BHU, RHC. Out of 56 BHU and RHC, only 20 HF have LHVs rest of 36 HF are without LHVs, which mean these health facilities may not provide natal care. Same is the case with male and female medical technicians and dispensers. The low EPI services are also due to non-availability of Vaccinator. Only 44 HF out of 56 HF have vaccinators which are of great concern.

The one of most important component is the knowledge and skill development of Health care providers. Only 10% of Health care providers are trained on IMNCI, ENCC and EmOC care. The LHWs are not training on community IMNCI and ENC while CMWs are not trained on latest community ENC and EmOC care course. This reflect the poor skill of the health care providers who are in the field but not able to delivery adequately and up to the mark.

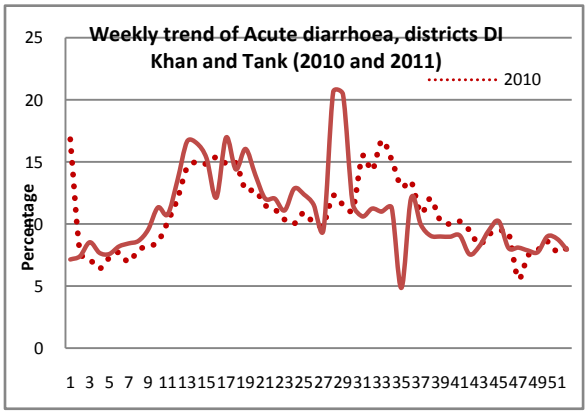
As per rapid assessment results, out of 53 assessed first level health care facilities, 34 health facilities are partially damaged, 2 are fully damaged while 17 are intact. As inquired by the assessment teams, most of the health facilities were damaged during floods 2010. The below graph shows the percentage of damaged health facilities in DI Khan, Hangu, Kohat and Tank:

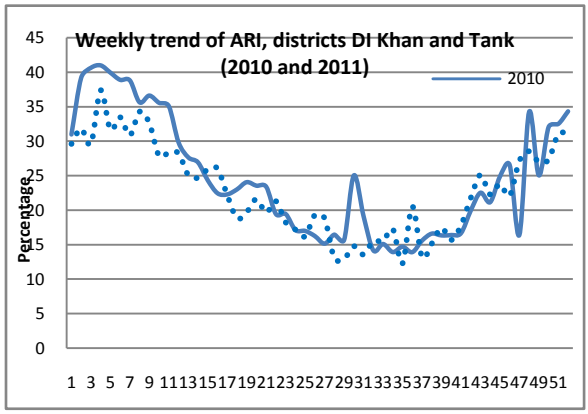


2. Communicable Disease Trend analysis:

To assess the trends of communicable diseases and outbreaks, the disease analysis was undertake for the neighboring districts together: DI Khan and Tank in one group and Kohat and Hangu in the other group, as their geography, climate, accessibility of health facilities, and experience with influx of IDPs indicates that they can be considered epidemiologically similar.

In DI Khan and Tank, comparing year 2010 and 2011 weekly reporting from the health facilities, the trends of seasonal diseases are similar between the two years. The proportional morbidity for Acute Diarrhea shows two peaks – one in spring and one in late summer. The seasonal trend for Acute Respiratory Infections (ARI) shows a consistent peak in late January each year.

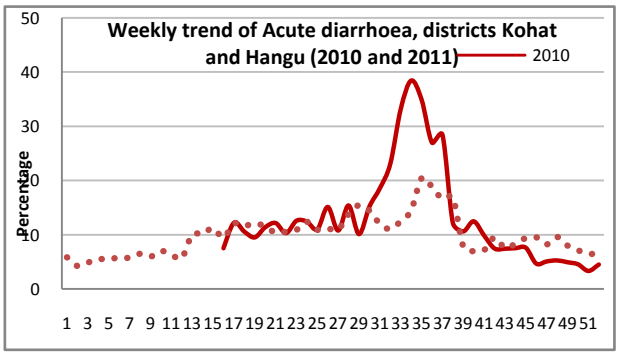


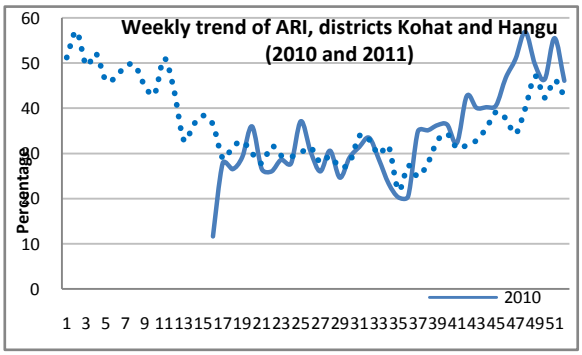


Regarding outbreaks and threats of outbreaks, the analysis shows that 2010 summer was worst for AWD/ cholera while measles and pertussis were prominent threats in spring and winter of 2011. Both AWD and Measles spread rapidly where population is congested and poverty-stricken, conditions existing in camps and areas where IDPs have joined hosting populations for temporary stays. Contol of cholera depends on awareness and capacity of communities to find safe drinking water. Measles epidemics threaten where children have not been immunized, and measles mortality is worst in under-nourished children. It spreads like fire where people are living close together. Thus we see an increasing risk for cholera and measles in the camps and hosting districts.

DEWS Reported Alerts / Outbreaks from DIK & Tank -IDPs Crisis Districts										
For the period 1st Jan,2009 -- 28th Jan,2012										
Years	2009		2010		2011		2012		Total	
Diseases	A	O	Alerts	Out-breaks	Alerts	Out-breaks	A	O	Alerts	Out-breaks
AWD	0	0	14	7	4	3	0	0	18	10
DHF	0	0	0	0	11	0	0	0	11	0
Diphtheria	0	0	4	0	2	0	0	0	6	0
Leishmaniasis	0	0	0	0	6	0	2	0	8	0
Measles	1	0	18	0	43	0	9	1	71	1
Meningitis	1	0	0	0	0	0	0	0	1	0
NNT	0	0	0	0	5	0	4	0	9	0
Pertussis	0	0	0	0	8	1	0	0	8	1
Tetanus	0	0	0	0	1	0	0	0	1	0
Total	2	0	36	7	82	4	15	1	135	12

In Kohat and Hangu, complete data for 2010 does not exists but it is pertinent to mention that the proportional morbidity for acute respiratory illness (ARI) was over 50% in December 2010 to January of 2011, most likely due to spread of seasonal influenza as was documented in Swabi during this time. It is a disease pattern seen in crowded populations and indicates the pressure of the influx of population to these districts. The increase in Acute Diarrhea





noted in 2010 in Kohat and Hangu corresponds to the time of the August 2010 Flood in all of Pakistan. It is believed that the flood waters raised the ground water level causing mixing of sewage and well water in many areas. Thus in 2011 the unusual high proportional morbidity of Acute Diarrhea reaching 20% is still the after-effect of the 2010 Flood. However, as is noted in the alerts and outbreaks received from this area, AWD/ cholera outbreaks threatened the population in 2010 and 2011 indicating that the influx of IDPs brought the cholera organism into contact with susceptible population.

Kohat and Hangu also had frequent alerts and outbreaks of the killer vaccine preventable diseases of diphtheria, measles and pertussis. This indicates the very poor coverage of immunization among both the IDPs and the hosting population and the quick spread of disease in the congested conditions caused by the presence of IDPs. Altogether the data indicates that outbreaks of both water-borne and vaccine-preventable diseases were a greater threat in the districts hosting IDPs.

DEWS Reported Alerts / Outbreaks from Hangu & Kohat -IDPs Crisis Districts								
For the period 1st Jan,2009 -- 28th Jan,2012								
Years	2010		2011		2012		Total	
Diseases	Alerts	Outbreaks	Alerts	Outbreaks	Alerts	Outbreaks	Alerts	Outbreaks
Acute Diarrhea	0	0	9	0	0	0	9	0
Acute Jaundice	0	0	1	0	0	0	1	0

ARI	1	0	0	0	0	0	1	0
AWD	13	6	18	3	0	0	31	9
Bloody Diarrhea	0	0	3	2	0	0	3	2
Diphtheria	0	0	2	0	1	1	3	1
Leishmaniasis	0	0	2	0	0	0	2	0
Measles	4	0	8	0	3	0	15	0
Pertussis	0	0	3	1	0	0	3	1
Typhoid	0	0	1	1	0	0	1	1
Total	18	6	49	7	4	1	71	14

3. Environmental Health

Providing safe water, adequate sanitation and proper hygienic conditions is an important component in controlling the spread of infectious diseases in healthcare settings. Majority of health facilities in KPK are under-resourced with little attention being paid to their overall hygienic and sanitation situation, which resulted in poor quality of health service. Water quality monitoring needs to be strengthened to avert waterborne diseases and health education and hygiene campaigns need to be conducted to educate the communities on hygiene and safe drinking water and effective health seeking behavior. In addition, viable technical strategies for waste disposal also have to be promoted to ensure patient safety and local environmental health.

Water and sanitation infrastructure need urgent attention. As per rapid assessment regarding medical waste, 25 hospitals of the assessed burn their medical waste but only 5 hospitals have proper incinerators. 7hospitals burried their waste and the rest 51% Hospital facilities dump away their waste without any safety control measures as proper healthcare waste management is not implemented. Improper hospital waste disposal post is a threat to the surrounding population, with the risk of contaminating the ground water and posing other environmental health risks.

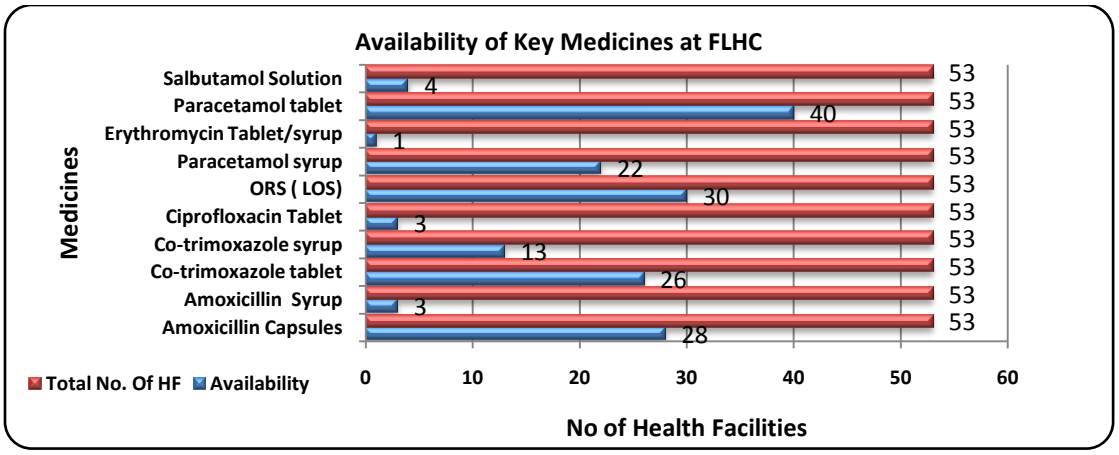
Only 74% of have water supply and only 81% have supply of electricity. 40% hospitals have no functioning toilet. 80% of the hospitals have damaged/blocked sewerage system and water supply pipes. 90% water samples collected from assessed hospitals have shown microbiological contamination. District Tank has acute shortage of drinking water problems as the water table is very low.

Water and sanitation: Sanitation facilities and hygiene conditions amongst the affected population and in the assessed health facilities is very poor. Toilet facilities were available 95% hospital but 6 hospitals did not have separate toilets for males and females. 76 % Functional toilets in the rest of the hospitals are in very poor condition. Sanitary staff is available only in 10% of the hospitals. Hygiene and safe drinking water is a major concern. Health education awareness campaigns should be increased in the entire district to educate the community on hygiene, safe drinking water and sanitation.

4. Essential Medicine Situation

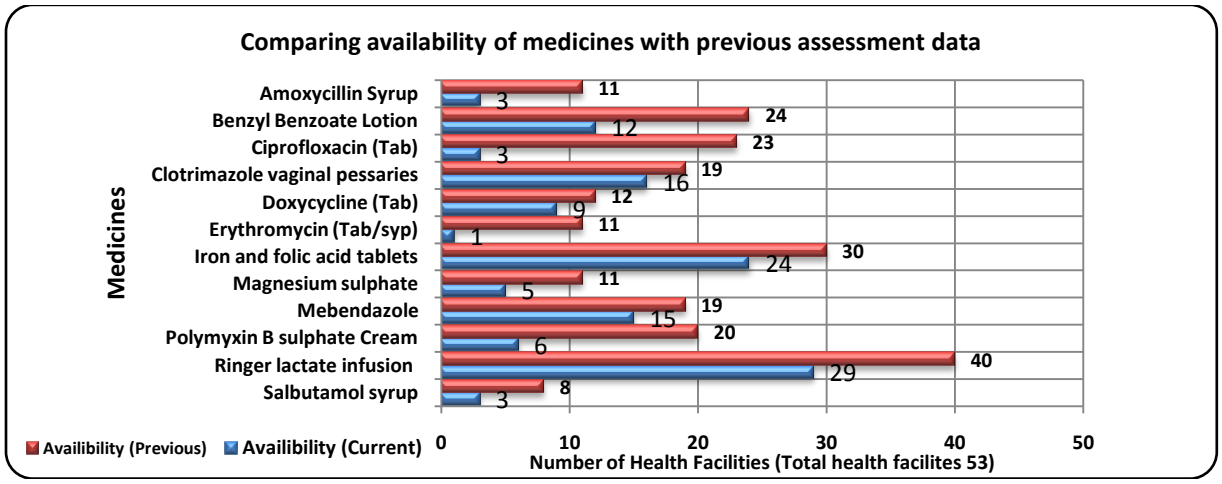
a. Availability of key essential medicines at FLHC

Communicable disease always put significant percentages on overall disease burden as well as mortality rates and availability of essential medicines always vital to response not only epidemics but also can serve basic health needs of the majority of the population. It is quite alarming that supplies of key essential medicines at first level health care facility averaged less than 50% of all the health facilities assessed. Like oral rehydration satl (ORS) is available in 30 facilities and first line antibiotic amoxicillin capsule was available in 28 out of 53 assessed health facilities. Children consultation always remains very high at first level health care facilities but below graph show the pertinent peadritic preparations scarcity. Erythromycin syrup was available in just 1 facility; amoxicillin syrup was available in just 3 facilities and more than half of the facilities were lacking paracetamol syrup.



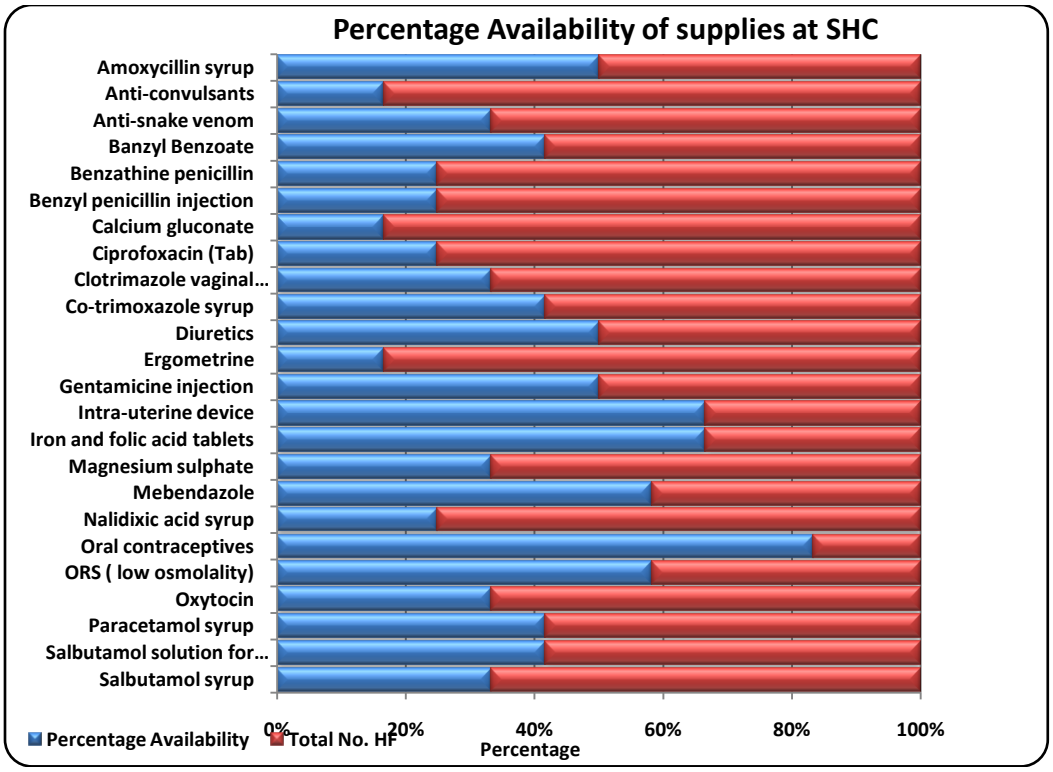
Comparing the availability of medicines with previous assessment data at FLHC

The following comparison clearly shows the currently less availability of the medicines and supplies at selected facilities while making comparison with last assessment data. This short study along with the consultation data gives a clear glimpse of overburden of these units



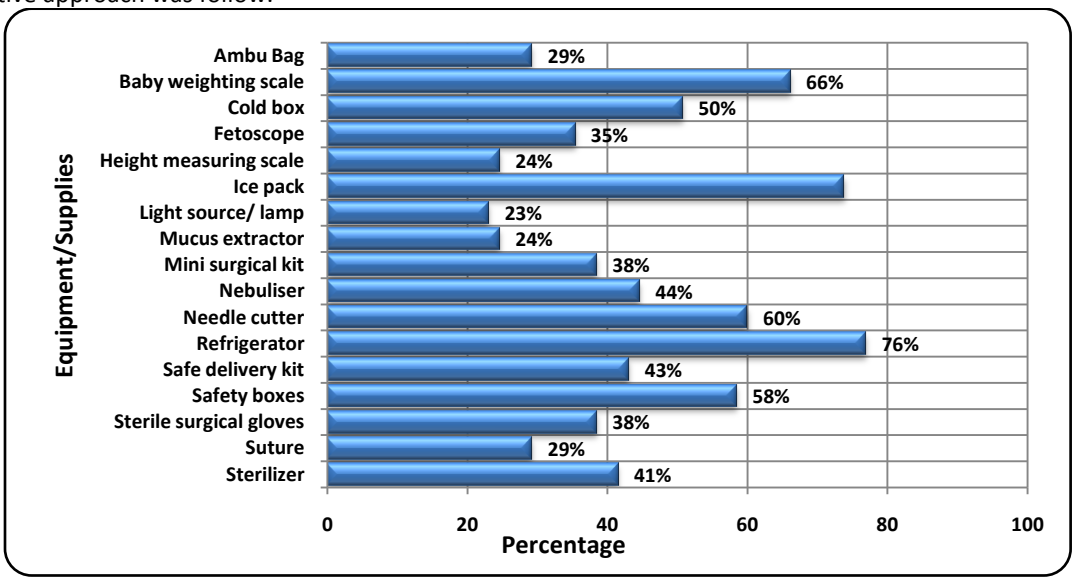
b. Availability of key essential medicines at SHC

For the effective health care services delivery it is very important that the referral system should be efficient to response any emergency as well as backup support for the vicinity first level health care facility. From the following analysis it is obvious that amoxicillin, paracetamol, co-trimoxazole, ciprofloxacin, ORS, Salbutamol were available in less than 60% of the health facilities accessed.

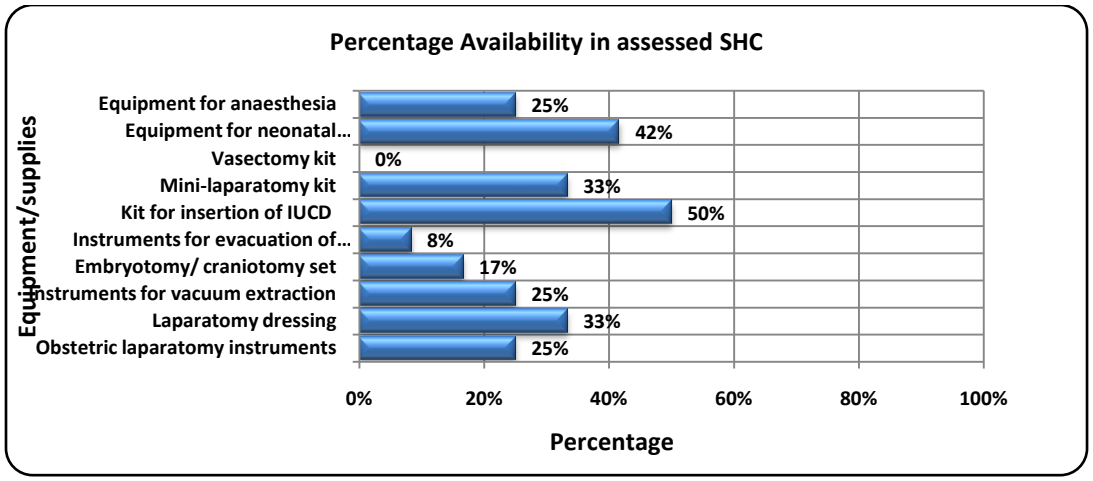


c. Status of Essential Supplies

From the below graph plotted on the availability of essential supplies in the 65 health facilities, it is apparent that most of the important supplies were available in less than half of the facilities. To get a better idea quantitative approach was follow.



<u>Specialized equipment availability at SHC facilities assessed.</u>



Standard Health Package in camps:

A health post within a Camp or a Basic Health Unit (BHU) serves catchment population of 10,000-15,000. The services provided at this level are of promotive, preventive and curative nature. Outreach and community based services are part of the package provided by the BHU/ health post in camp. BHU/ health post within camp provides all Primary Health Care (PHC) services which includes antenatal and postpartum care; family planning; assisted spontaneous vaginal delivery; routine Expanded Program of Immunization (EPI) and nutrition promotion/education as well as management of mild to moderate malnutrition. Other services provided includes management of communicable diseases (such as malaria, tuberculosis), Health education, growth monitoring; management of childhood diseases; and the provision of essential medicines for common ailments as well as basic medical and surgical care. It also supports LHWs to undertake health promotion activities at community level. The BHU / health post also provides primary care to patients referred by LHWs and further refers more serious patients which cannot be managed at that level to the secondary or tertiary level.

The BHU/ camp health post are responsible for provision of following PHC services as the minimum requirements:

- Essential MNCH package including antenatal, postnatal care and family planning.
- Provision of assisted deliveries by skilled birth attendants.
- Recognizing, stabilizing and referring obstetric, neonatal and other emergencies to the higher level and follow-up the referred cases as per instructions from the referral level (RHCs/THQs/DHQs).
- Provision of routine EPI services for children including Tetanus Toxoid for pregnant women, including outreach and supporting Polio Eradication Initiative.
- Counseling and provision of family planning services (pills, condoms, injectable, lactational amenorrhea and IUDs)
- Counseling, prevention and syndromic management of STIs
- Nutrition promotion and education through counseling: including growth monitoring, ongoing surveillance of the nutrition status using weight for age and weight for height measurements with identification of probable causes exclusive breastfeeding, timely and appropriate introduction of complementary feeding, nutrition during pregnancies, management of Iron Deficiency Anemia and Vitamin A deficiencies, diagnosis and referral of moderate and severe acute malnutrition.
- Identification of severely and moderately malnourished children and referring cases of severe malnourished children
- Prevention, assessment and management of diarrheal diseases and ARI
- Establishment of ORT corner and training mothers to use of ORS

- Early detection, treatment and/or referral of Hypertension, Diabetes, skin infections including scabies.
- Screening of suspected malaria cases, provision of treatment to uncomplicated malaria cases, referral of complicated and severe malaria cases.
- Identification and referral of suspected cases of TB to diagnostic centers (DHQs, THQs and RHCs). Subsequently treatment and follow-up of the diagnosed TB cases is undertaken at the BHU level and reported to the diagnostic center concerned.
- Provision and management of medicines as per national essential medicine list/pharmacy services.
- Recording and reporting activities based on available HMIS tools in line with the service being provided
- Developing linkages with the LHWs/ CHWs/ Health Promoters and support them for provision of quality health care services
- Coordination with communities through Health committees established by the Lady Health Workers and developing a plan of action for areas not staffed with LHWs.
- Identification, management and referral of common mental disorders (depressive illness, psychosis, substance abuse disorders, epilepsy, anxiety disorders and Post traumatic stress disorder).
- Health Education and promotion.

Standard Health Package for returnees:

The health return package includes vaccination of children at the time of embarkation, TT vaccination for pregnant women, clean delivery kits for women, ambulance for moving convey and delivery of essential life saving primary health care services to the returning population in the their areas of return, which include, treatment of common illness, provision of essential medicines including treatment of chronic illness, vaccination services, ante natal and post natal care, normal deliveries with referral of complicated cases, family planning services, mental health services. Initially the services will be delivered through mobile units. These mobile units will be visiting the areas as per plans prepared in consultation with the local health authorities with at least twice weekly coverage of population. Each mobile unit will have one male and female health care provider with one dispenser and essential medicines and supplies for PHC services. The early rehabilitation of basic health units will be planned in parallel to support PHC in the long run.

Diseases surveillance in the areas of return which included data collection on weekly basis, alert investigation, outbreak response (prevention and control) along with environmental health intervention such as monitoring water quality in areas of return.
Health education campaigns for disease prevention

RH/MNCH: UNFPA findings from field assessment:

UNFPA field assessment mission concluded that provision of Natal, Antenatal and Post natal facilities at the camp level in New Durrani and Togh Saray is required to reduce maternal and neo natal morbidity and mortality. Though 24/7 ambulance is available at the camp level, but mostly the women use to deliver at their camp, without any trained personnel.

The following are the RH/MNCH needs in the host districts and IDPs camps.

- Adequate number of clean & safe deliveries by skilled and trained staff, to minimize maternal and neonatal deaths.
- Midwives and health facility have adequate equipment and supplies for safe deliveries and emergency obstetric care
- Safe access to an emergency referral system 24 hours per day, 7 days per week. (Provision 24/7 RH services ANC, PNC, STI, FP and BEmONC)
- Free medicines for every female.

- Treatment for sexually transmitted infections.
- Family Planning services to improve women's health.
- Referral mechanism for complicated cases of ante-partum haemorrhage, post-partum haemorrhage, eclampsia and pre-eclampsia and minimizing maternal deaths.
- Improvement in health behaviour of displaced population.

Response strategy:

i. Coordination of emergency health response, streamlining of decision making, monitoring and information management:

Coordination is the back bone for the streamlining of response, decision making and monitoring of the activities and its impact on the life of affected population during emergencies and early recovery phases. The operational platform under the leadership of WHO has been instrumental in mounting adequate and timely response by WHO and Health ClusterPartners, including the government, to life threatening risks and diseases, saving lives and reducing disease. The Area offices have also made it possible for health responders to reach the farthermost periphery, especially in case of alerts for life threatening communicable diseases. This operational platform requires the continued placement of manpower and financial support to allow health cluster to function and sustain current services including wide-scale distribution of life saving essential drugs.

The Health Cluster has set up an effective and efficient mechanism of coordination at provincial and national level whereby the health partners share/map the information, produce situation reports and 'who is doing what and where' matrix. The information is used to identify the gaps and plan the response activities.

In support to the provincial and FATA Directorates of Health, the World Health Organization as the Health Cluster lead, along with cluster partners, is ensuring that:

- A coordinated response is put in place to ensure delivery of health services to the most vulnerable
- The communicable disease surveillance and outbreak response system is expanded and is robust for timely detection of disease, and prevention of outbreaks
- Stocks of necessary medicines and supplies are delivered to warehouses, as requested by the health authorities
- Water and sanitation condition is improved in the targeted agency/areas

Information management activities will also be strengthened at all levels to guide decision making, identify needs and critical gaps, and monitor impact of interventions. Additional expertise for GIS/geo-spatial analyses will also be commissioned to produce maps including mapping of health partners working in the affected areas to avoid overlapping and duplication of activities. Information management capacities including those for geo-spatial analyses will be made available at Islamabad office and field hubs.

ii. Provision of essential package of Primary Health Care services (including MNCH/RH/FP, Nutrition and immunization)

Ensuring that government health facilities in the affected areas are made operational through provision of essential medical equipment and provision of necessary medical male and female staff through health cluster partners and support to health department. Continuation of provision of essential primary health care (PHC) services including activities within the Minimum Initial Service Package (MISP) for reproductive health will be ensured. Mass vaccinations/immunization campaigns and awareness campaigns of healthy practices for the masses would be launched for the community. The damaged health facilities would be rehabilitated by minor repair and providing essential medical equipment

The foremost requirement that has been identified is the dearth of human resource which immediately needs to be addressed. Therefore, relevant health personnel would be duly appointed at the targeted health facilities and special incentives would be given to female staff working in the security compromised areas. This could also be carried out by out sourcing to partner NGOs with due consultation of Department of Health.

Provision of emergency health services, for basic care of under five children, would be ensured by establishing under 5 clinics in all health facilities where Integrated Management of Newborn and Childhood Illness (IMNCI) strategy will be implemented. Maternal and Newborn care would be provided through Basic Emergency Obstetric Care (BEmOC) and Essential Newborn Care (ENC) packages respectively. The Health care providers would be trained on IMNCI, ENCC and Basic EmOC for enhancement of their skill and knowledge through the outsource partners.

Routine vaccination would be accelerated by increasing the number of vaccination sites with specific emphasis to Polio, Measles vaccination, Maternal TT and vitamin A supplementation. Moreover, mass communication and social mobilization activities would also be undertaken for awareness of the masses on healthy practices and protection from diseases.

Rehabilitation/ reconstruction of 34 partially damaged and 2 full destroyed health facilities including water supply and storage and/or setting up of ad-hoc temporary health facilities to revitalize the primary health care services will be ensured with the support of health department.

Furthermore, critical requirement is to enhance the referral capacities of first-level care facilities in peripheral areas of priority Health facilities by providing ambulances and fuel.

iii. Disease Early Warning System (DEWS):

In view of the threats of water-borne diseases such as Cholera and Dysentery and the vaccine-preventable diseases such as Measles, Pertussis and Dysentery, support to the Disease Early Warning System (DEWS) for early detection and response to epidemics is crucial for reducing morbidity and mortality from communicable disease in the camps and among the IDPs in the hosting districts.

While in some areas of the country, the provincial governments are taking on the challenge of running DEWS, in the targeted four under-served districts of Khyber Pukhtunkhwa and in FATA, the government does not have the resources or capacity to implement DEWS. WHO requires funding to continue support to DEWS for 2012 to respond to the epidemic threats in the areas of greatest risk due to: crowding, poverty, under-nutrition, poor coverage of immunization and health services, unsafe water supply, and inadequate sanitary facilities – the vulnerable IDP populations in camps and hosting districts.

DEWS surveillance officers are currently in three of the four targeted districts and covering the fourth by proxy. If support is forthcoming, DEWS teams will continue efforts to mitigate morbidity and mortality caused by epidemic-prone diseases through alert and outbreak detection and timely and effective response. DEWS team includes an Environmental Health Engineer to address water-borne disease outbreaks, and implementation will be linked to efforts by the Nutrition and WASH Clusters, and other Health Cluster stakeholders to provide an integrated response to prevent and control spread of communicable diseases. Support to DEWS operations requires logistical support for investigation of alerts and response to outbreaks and for active surveillance and data collection from peripheral facilities.

In addition to control of communicable disease, DEWS provides public health professionals on the ground in the targeted districts and agencies for immediate reporting of any public health event to the health partners as well as weekly reporting of disease trends seen in the health facilities. DEWS team analyzes data on a weekly basis and disseminates a report to all government and non-government partners. The new “eDEWS” or electronic online DEWS will be introduced in the targeted districts to further streamline the information collection system and timely alert detection and response.

By sharing weekly analysis of disease trends and disease alerts and outbreaks at provincial and FATA Directorate levels, DEWS will also play a role in health education for care of newborns and young children; advocacy for immunization; prevention and control of waterborne diseases; infection control in hospitals; vector control; water quality testing; sanitation and hygiene promotion. DEWS focal persons in each health facility and district/Agency team will be nominated by the local authorities and will be trained on standard case definition, data collection, alert generation, and reporting and will jointly investigate and respond to outbreaks.

Capacity of the health authorities would be enhanced through trainings and necessary supplies and equipment for alert outbreak investigation and response, data collection and analysis and information generation for action. Communities will also be brought on board for generating alerts and for taking action for ensuring safe drinking water, adequate sanitation, immunization of children and control of vectors in the environment.

iv. Provision of life saving essential medicines and supplies:

Uninterrupted and sustained provision of essential medicines, medical supplies, and equipment has been critical to health delivery at all levels of health service delivery. The Essential Medicine package provided during the relief phase covers the treatment for communicable diseases, non-communicable diseases, MNCH related medicines, paediatric preparation and item for the minor Surgery, as well as maintained the contingency stock of key medicines for preparedness and response to alerts. These lifesaving interventions played a vital role in reducing the incidence of morbidity and mortality. In addition the provision of essential medicines increased the utilization of underutilized public health facilities evident from the consultation data (increased from 0.12 visits per capita per annum to 0.8 visits per capita per annum).

Essential medicines and supplies will be provided on regular basis to avoid any lapse in the delivery of essential healthcare. Geographic stockpiling will be planned for in a way that allows immediate response to outbreak alerts as well as for the district. Medicines will be bought and imported in accordance with the National and WHO essential medicines list. In order to reach population faster, medicines and equipment will be purchased and dispatched in ready-to-deploy kits. Some kits will require international air shipment to ensure timely availability and delivery.

Capacity of the Health partners and department of health staff will be enhanced on medicine management. The essential medicines team set up within the coordination mechanism will monitor the rational use, storage and dispensing activities. The Logistic Support System (LSS) installed at district for transparency and traceability of supplies will be expanded. Essential Medicine Team (Pharmacists) is working to check the rational utilization of medicines and capacity building of the health care providers (implementing partners and government health department) on evidence based quantification and adherence to the standard treatment protocols.

Maternal, new-born & child health care services, Immunization coverage:UNICEF

The following activities would be undertaken in IDP camps and hosting communities under the leadership of UNICEF in partnership with Government, UN organization and NGOs:

1) Strengthening of Routine EPI through provision of cold chain equipment (ILRs, Solar refrigerators, Deep freezers, cold boxes and vaccine carriers) and capacity building of staff and filling of HR gaps.
2) Children 6-59 months receive measles immunization & Vitamin A supplementation
3) Under-five children & their mothers in emergency affected households & communities receive a defined package of maternal, newborn & child health care services NFIs (Newborn kits, clean delivery kits and LLINs) , Deworming ,multi micro nutrient supplementation & information through Mother and Child Days/ Weeks
4) Emergency affected families receive messages on diseases preventions, home care and care-seeking in illnesses

5) Community based health programs (LHW and MNCH programs are revitalized so that Emergency affected communities have access to basic Maternal, Newborn and Child Care services at their doorstep.
6) Emergency affected communities in IDP camps and hosting communities in Khyber Pakhtunkhwa have access to 24/7 Basic & comprehensive Emergency obstetric care & newborn care services
7) Strengthening of MCH services including Basic and Comprehensive EmONC services in selected public sector health facilities through filling of HR and supplies and equipments gaps and capacity building of the relevant staff.
8) Strengthening of specialized Pediatric services in DHQ Hospitals of DI Khan and Tank

v. Mother & Child Health/Reproductive Health: UNFPA

UNFPA along with partners and DoH will be at the forefront to fulfil the life saving needs of IDPs in Reproductive Health with special focus on 24/7 Basic Emergency Obstetric & New-born Care services (BEmONC), coordinating other camp based services including health, & nutrition with other UN agencies and humanitarian actors.

The following activities will be implemented by UNFPA and partners:

- 24/7 RH Services with focus on BEmONC
- Medical treatment of GBV survivors
- Strengthening Health Facilities by providing RH Kits, essential equipment and supplies
- Distribution of RH (Kit 2A Clean Delivery), Hygiene, Baby Kits
- Session for women and youth regarding RH, GBV, General Health care and hygiene.
- Renovation of labour rooms.
- RH and GBV information sessions

vi. Prevention and control of waterborne Diseases:

Providing safe water, adequate sanitation and proper hygienic conditions is an important component in controlling the spread of infectious diseases in healthcare settings. Majority of health facilities in KPK are under-resourced with little attention being paid to their overall hygienic and sanitation situation, which resulted in poor quality of health service. Water quality monitoring needs to be strengthened to avert waterborne diseases and health education and hygiene campaigns need to be conducted to educate the communities on hygiene and safe drinking water and effective health seeking behavior. In addition, viable technical strategies for waste disposal also have to be promoted to ensure patient safety and local environmental health.

Water and sanitation infrastructure need urgent attention. Regarding medical waste, 25 hospitals of the assessed burn their medical waste but only 5 hospitals have proper incinerators. 7hospitals burried their waste and the rest 51% Hospital facilities dump away their waste without any safety control measures as proper healthcare waste management is not implemented. Improper hospital waste disposal post is a threat to the surrounding population, with the risk of contaminating the ground water and posing other environmental health risks.

Only 74% of have water supply and only 81% have supply of electricity. 40% hospitals have no functioning toilet. 80% of the hospitals have damaged/blocked sewerage system and water supply pipes. 90% water samples collected from assessed hospitals have shown microbiological contamination. District Tank has acute shortage of drinking water problems as the water table is very low.

Water and sanitation: Sanitation facilities and hygiene conditions amongst the affected population and in the assessed health facilities is very poor. Toilet facilities were available 95% hospital but 6 hospitals did not have separate toilets for males and females. 76 % Functional toilets in the rest of the hospitals are in very poor condition. Sanitary staff is available only in 10% of the hospitals. Hygiene and safe drinking water is a major concern. Health education awareness campaigns should be increased in the entire district to educate the community on hygiene, safe drinking water and sanitation.

Activities:

- Improve water quantity and quality of the healthcare facilities serving affected communities;
- Improve water quality and quantity and sanitation facilities addressing specially needs of women (keeping privacy);
- Health facility sanitation services of critical units of the health facility will be improved, with repair of existing latrines where necessary, with female health workers and patients access to appropriate and separate (male/female) sanitation facilities ensured;
- Provision/repair of hand-washing facilities in critical units of the health facility, where needed as per Ministry of Health (MoH) standards;
- Provision of soaps, detergents and other health facility disinfectant chemicals, to improve overall hygienic conditions and infection control mechanisms of the critical units of the health facility;
- Equipment, hand tools and other supplies (waste bins of different sizes, brooms etc) needed for the collection, transport and safe disposal of healthcare waste will be provided;
- Personal protective gears (clothes, gloves, boots, aprons, etc) will be supplied to sanitary workers;
- Conduct healthcare hygiene promotion and awareness raising trainings in each health facility, for senior medical staff, nurses and sanitary worker, with focus on infection control;
- Provision of hygiene and healthcare infection control education materials (messages, pamphlets, brochures etc)
- Adequate detailed information regarding the hazardous nature of waste material to persons responsible for its handling, transport, treatment, storage or disposal will be provided;
- Hazardous wastes handling staff will be provided with appropriate safety devices such as safety masks, goggles, hand gloves, and boots;
- Adequate Occupational Health and Safety (OHS) standards will be introduced at facilities handling hazardous wastes

Water Quality Monitoring:

- Conduct regular water quality surveillance affected areas, and routinely disseminate microbial water quality results and trends with all WASH partners;
- Monitor the environmental health conditions (safe water surveillance, sanitary and hygiene conditions) of affected communities, with special focus on inside camps IDPs;
- Support water borne diseases alert response, through water quality testing, disinfection and hygiene promotion;
- Provision of water quality testing kits and water disinfection chemicals
- Provision of hygiene and water safety and health inter-linkages education materials (messages, pamphlets, brochures etc)
- Support affected areas water supply service providers in water quality monitoring, through the provision of basic water physio-chemical testing, including water testing kits, supplies and reagents; including water disinfection chemicals; in-order to prevention or control water related diseases outbreaks
- Interventions will be based on a number of simple messages and activities aimed at breaking the cycle of water borne and water wash diseases and will aim to establish a link in people's mind between unhygienic practices and diseases and to provide information about what constitutes hygienic behavior
- Conduct graded water quality surveillance and treatment trainings for water supply service providers, senior managers, executive engineers, technicians and operators; including awareness sessions on waterborne diseases and the inter-linkages between ill health and water quality; basic aspects of surveillance, monitoring, chlorination procedures, sanitary inspections and use of testing equipments;

Response objectives:

Objective 1: Continuation and strengthening of essential PHC services in all affected areas and camps		
Outcomes	**Indicator**	**Activities**
Continuation and immediate restoration of the essential life saving primary health care services and strengthening of referral mechanisms along with Mobile Health Units coverage.	# of static health units re activated for provision of essential PHC services. # of active mobile units in the affected districts # of Mobile Health Units operational # of LHWs reached	- Reactivation/strengthen static health units with provision of necessary essential medicines, essential medical supplies. - Filling gaps in the Establishing referral system from primary to secondary and tertiary health facilities - Conducting campaigns (measles, polio, vitamin A supplementation & deworming tablets etc). - Revitalization of services by addressing LHWs needs
Accessibility to essential PHC services including MNCH/RH and immunization coverage to the affected population.	# of health units operationalized. # of consultations related to MNCH/RH and other key diseases undertaken. #of complicated cases referred # of coordinated health promotion activities delivered. # No of CBDRM training courses held/ no of volunteers trained # of LHWs and Community Health Workers(CHWs) trained on CBDRM #No of HOPE training courses held/ no of health and hospital staff trained	- Provision of health services 24/7 a week in communities with referral system to static health units for complicated cases - Provision of essential medical equipment - Establishing mobile teams in line with essential minimum mobile team standards - Endorsement of Health Promotion Guidelines for emergencies by health department. - Facilitate dissemination of guidelines and IEC materials through Government and non-government partners - Facilitate coordination of health promotion activities, through Government, at district level - Facilitate endorsement, dissemination and implementation of Community-Based Disaster Risk Management Manual for the health cluster - Training of LHWs and Community health workers on Community-Based Disaster Risk Management Manual developed for health cluster - Training of Health Cluster and hospital Officials & staff for Hospital operational preparedness for emergencies (HOPE)
Objective 2: Provision of essential life saving medicines and other medical supplies for filling gaps and unmet needs of medicines in the health facilities		
Outcomes	**Indicator**	**Activities**
Improving access and availability of essential life-saving medicines, supplies and equipment	# of EHKs, DTKs, ARI kits LLINs, procured and distributed.	- Procurement of medicines, supplies and equipment - Cold chain restoration Strengthening of LSS - Capacity building

Objective 3: Continuous communicable disease surveillance and response to mitigate morbidity and mortality among the conflict affected population		
Outcomes	**Indicator**	**Activities**
Prevention against emerging health threats and outbreaks through early detection and response and strengthening ofspeedy, timely, effective and coordinated joint health interventions. Waterborne diseases surveillance and identification of affected communities facing greatest health risks from water borne diseases identified and appropriate response mechanisms put in place.	# of alerts and outbreaks identified and responded within 48 hours. #No of training courses held for communities and health workers on DEWs # of workers trained in each course # of Rapid Response Teams deployed # of water samples collected, tested and reported	- Active surveillance in all affected areas through surveillance officers - Remedial actions to mitigate the outbreak - Carrying out laboratory tests for confirmation of an outbreak - Weekly analysis of consultation reports data from implementing partners - Deployment of rapid response teams (male and female members) to investigate alerts and outbreaks - Training of Communities & health workers for strengthening of DEWs - Speedy dissemination of IEC materials for mass awareness - Conduct regular water quality surveillance affected areas, and routinely disseminate microbial water quality results and trends with all WASH partners;
Objective 4: Coordinate and streamline health response within the cluster mechanism and in partnership with local authorities and other actors		
Outcomes	**Indicator**	**Activities**
Coordination meetings and federal, provincial, agency and district level	# of health cluster meetings held per month at federal/provincial/district/ agency level	- Continuation of the health cluster at federal, provincial and district/agency level - Coordination with the government counter-part for chairing the coordination meeting - Active information sharing and participation from all implementing partners in the meeting for effective coordination
HeRAMS activation and regular updates information sharing in the form of bulletins and situation reports	# of health facilities reporting to HeRAMS. # of health Cluster bulletins published/month	- Active updates from health Cluster partners Collection and compilation of 4W matrix and HeRAMs Collation of information and development of the monthly health Cluster bulletin

Cluster Monitoring Strategy:

Health Cluster partners will monitor health interventions according to the indicators outlined above disaggregated by sex and age, and conduct evaluations and assessments to measure the impact of the interventions and to facilitate improvement / changes where required. Specific areas of focus such as the DEWS will deploy surveillance officers in the districts affected for close monitoring and supervision of the disease trends and investigate any alerts and outbreaks to provide the timely and appropriate response. The essential drugs team will monitor the rational use, storage and dispensing activities and capacities of the department of health and all the proposing organisations through the deployment of a pharmacist in each district.

Health Cluster has established criteria for the assessment of partners' capacities in terms of human resources, financial management and internal controls, past experience in the health cluster especially in emergencies and post emergencies situation, familiarity with the community and national health authorities and active health Cluster participation. WHO has Surveillance Officers on grounds who are responsible along with technical support to the partners and for also doing monitoring of partners activities. WHO Pharmacists look into the rational use of

medicines and have proper system for the recording and utilization of medicines by the partners' staff. The Executive District Officer Health (EDO-Health) is also regularly monitoring the partners' activities on regular basis. Monitoring and Evaluation is an integral part of the Health Cluster Response strategy which initiated from the onset of the response. The monitoring of health Cluster activities is more participatory and collective in nature where all the stakeholders are involved in the monitoring process. Joint monitoring visits along with the EDO Health are one of the successful mechanism for the monitoring of Cluster activities. Health Cluster is using IASC standard indicators for communicable and non-communicable diseases including average population coverage, emergency obstetric care, maternal and neonatal care, etc. Health Cluster is using different data collection tools and methods for the assessment of health facilities like HeRAM (Health Resources Availability and Mapping) and IRA (Initial Rapid Assessment). Health Cluster Partners also participate in the Multi Cluster Rapid Assessment (McRAM) along with the UN partners. Health Cluster has established different Working Groups/Task Force for different areas like malaria, communicable diseases, Reproductive Health to look and monitor the response effectiveness and efficiency. The task force are established for specific period of time with specific objectives to monitor the implementation mechanism and rate for example the distribution of bed nets for malaria control in malaria porn districts in the conflict affected areas.

Communication and Information management, GIS mapping:

Communication and information Management (C&IM) will provide continuous updates on health cluster interventions by developing Who, What and Where (3W), and health maps using GPS coordinates. Newsletters, Health Bulletins, Situational reports and web sites will be produced to inform partners as well as the general public on health interventions and needs. Communications will be responding to, and lobbying for effective collaboration and sensitisation of media as well as utilising their resources to address the wider audience. Brochures, Information, education and communication messages (IEC material), pictorial coverage of health cluster initiatives, outbreaks, disaster reports, video interviews, documentaries as well as developing need / human interest, success stories and messages via channels of mass media communication will be used.

HeRAMS (Health Resources & Services Availability Mapping System) is a Standardized Approach supported by a software-based IT Platform that aims at strengthening the collection, collation and analysis of information on the availability of health resources and services in Humanitarian Emergencies. It supports WHO, Department of Health, and Health Partners better achieve the provision of equitable, relevant and efficient health services and better allocate resources towards fulfilling humanitarian needs and ensuring their sustainability beyond Humanitarian interventions. HeRAMS aims to support Evidence Based Decision Making and reinforce coordination & accountability within the Health cluster. By monitoring information about the availability of Health Resources and Services, mapping Health Partners activities and clearly identifying gaps, HeRAMS aims at an overall improved and more sustainable Humanitarian Response.

Table of proposed coverage per site

ORGANIZATIONS	SITE / AREA
WHO, UNICEF, UNFPA and National and International NGOs partners	DI Khan, Tank, Kohat, Hangu, Camps: Jalozai, Togh Saray in Hangu, New Durrani Kurram Agency and population in return areas of Kurram

Note: DoH-KP, DoH-FATA and NGO partners will also be part of the response in the affected areas.