

# Emergency Plan of Action (EPoA) Pakistan: Dengue Outbreak


<b>DREF Operation n° MDRPK017</b>	<b>Glide n° EP-2019-000123-PAK</b>
<b>Date of issue:</b> 11 October 2019	<b>Expected timeframe:</b> Three months <b>Expected end of date:</b> 4 January 2020
<b>Category allocated to the disaster or crisis:</b> Orange	
<b>Overall operation budget:</b> CHF 124,377	
<b>Total number of people affected:</b> 19,296	<b>Number of people to be assisted:</b> 210,270
<b>Host National Society(ies) presence (n° of volunteers, staff, branches):</b> PRCS has its National Headquarters in Islamabad with over 100 staff and thousands of active volunteers in Islamabad and Rawalpindi.	
<b>Red Cross Red Crescent Movement partners actively involved in the operation: -</b>	
<b>Other partner organizations actively involved in the operation:</b> Directorate of Malaria Control (DOMC) and Ministry of Health Department at federal level and local administration authorities	

## A. Situation analysis

### Description of the disaster

A total of 19,296 dengue positive cases have been confirmed as of 2 October 2019 and more than 30 deaths were reported in September based on Federal Disease Surveillance and Response Unit from Field Epidemiology and Disease Surveillance Division – National Institute of Health (NIH), Islamabad.

Based on the case trend, daily 365 new cases are expected in Government Hospitals during next three months (refer to figures below). Approximately 9,403 cases have been reported in last fifteen days (1 to 16 September 2019) across the country, out of which 4,077 cases (51 per cent) were reported in Rawalpindi and Islamabad city. According to Ministry of Health statistics, around 2,777 positive cases of dengue has been reported in federal capital of Islamabad since the start of monsoon season. Print, electronic and social media are also actively reporting the presence of dengue in twin cities and prevailing condition of daily case reporting. According to a report by special Assistant to the Prime Minister on Health - Dr Zafar Mirza, reported confirmed 12,500 dengue cases across the country on 30 September 2019 and mainly half of them were reported from the Potohar region, which includes Islamabad and Rawalpindi. This region is a plateau in north-eastern Pakistan, forming the northern part of Punjab and borders the western parts of Azad Kashmir and the southern part of Khyber Pakhtunkhwa (KPK). Map of the affected areas can be accessed [here](#).

 GOVERNMENT OF PAKISTAN  
OFFICE OF THE DISTRICT HEALTH OFFICER  
MINISTRY OF NHR&C ISLAMABAD

Subject: **DAILY DENGUE REPORT 30<sup>th</sup> SEPTEMBER 2019**

**A. Patients Count**

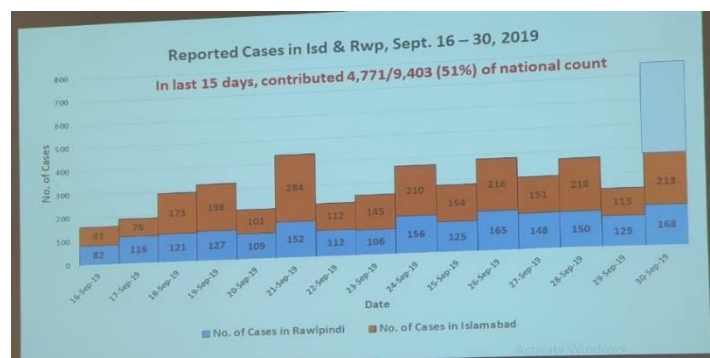
Total Patients from 1st June to 22nd September 2019	New Patients in Last 24 Hours	Rural Area Patients	Urban Area Patients	Patients from RWP	Patients from other District
2714	278	2031	547	133	3

**B. Hospital Admission**

S.No	Name of Hospital	Last 24 Hour Patients	Total Patients	Deaths	
				Number	Areas
1	PAKISTAN INSTITUTE OF MEDICAL SCIENCES (PIMS)	22	211	0	
2	FO POLY CLINIC HOSPITAL	91	477	0	
3	CAPITAL HOSPITAL	10	80	1	G-7/2: 1
4	SHIFA INTERNATIONAL	0	61	0	
5	AL-MAFEEES HOSPITAL	0	8	0	
6	KALSOOM INTERNATIONAL	0	12	0	
7	FEDERAL GENERAL HOSPITAL	56	156	0	
8	B.B HOSPITAL	16	395	0	
9	HOLY FAMILY HOSPITAL	66	520	6	Koral: 3, Tarlai: 1, Rawat: 2
10	DHQ HOSPITALS (RWP)	12	384	1	Rawat: 1
	<b>Total</b>	<b>278</b>	<b>2714</b>	<b>8</b>	

**C. Response by Teams**

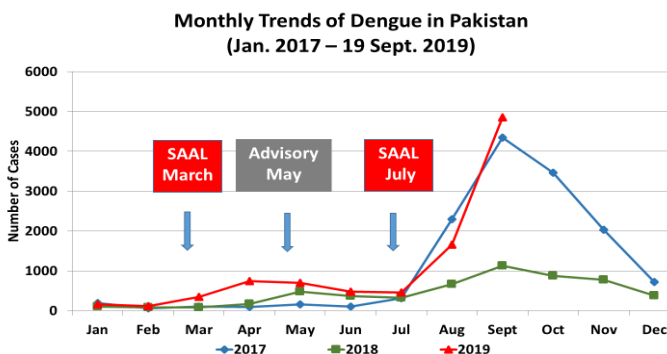
Number of Total Cases in Rural Areas	Total Cases Responded	Cases Responded in last 24 hours	Patients Back Log	General Fogging and IRS	
				Houses IRS done	Fogging
2031	1174	43	537	224	160



Presentation slides shared in DoMC daily morning meeting about exacerbating situation in Twin cities and daily case load in Islamabad and Rawalpindi area. (Source: MoH and PRCS)

The current outbreak is predominantly due to Dengue Fever Type 2 (DEN-2) in Rawalpindi and Islamabad, where as in KPK Province outbreak is due to Type 1 (DEN-1) and Type 2 (DEN-2) both. KPK province is the southern part of Potohar region and intra provincial transmission of Type 1 virus can be an additional threat of increased outbreak in twin cities. Viral transmission is highly probable due to frequent daily travel from capital to KPK cities and vice versa. The following slides were presented on 2 October 2019 during daily meeting at Department of Malaria Control (DoMC) about the exacerbating situation in twin cities.

In Pakistan Dengue fever and Dengue hemorrhagic fever are fastest emerging arboviral infections since 2005. During 1995 to 2004, only 699 dengue cases and 6 deaths were reported from three districts in the country while, these numbers have been dramatically increased to 127,500 and 709 deaths respectively effecting 105 out of 154 districts/ agencies/ territories during 2005 to 2018. The disease epidemiology is complex in nature and patterns of disease transmission is influenced by many factors which include weather and environmental changes, vector species composition, behavior, geographic distribution, population dynamics, degree of immunity among local population and density, and time required for development of virus in vectors. The dengue outbreak trend in 2019 has increased 35 per cent from 2017 where similar increment can be seen in mortalities in 2019 with 37 death as of 2 October 2019 compared to five death in 2018. Epidemiological trend diagram above reflects a clear indication of disease outbreak in the year 2019 as compared to the last two years i.e. 2017 to 2019<sup>1</sup>.



Seasonal Awareness and Alert Letter (SAAL). (Source: *Epidemiology and Disease Surveillance Division – National Institute of Health (NIH), Islamabad*)

Another reason of the outbreak is heavy rainfall during recent monsoon season which has been quite heavy this year as compare to last year across the country including Sindh and Punjab province, resulting in the emergence of dengue cases from most parts of the country in the 2<sup>nd</sup> half of September 2019. The worse hit areas are Rawalpindi and Islamabad. These cases continued to rise and by 20 September 2019 with a sudden surge was noticed where several patients admitted in the major Government hospitals of Islamabad.

This a precarious situation and need an immediate attention as far as its control is involved. Disease recurrence and potential to harm everyone in the city and adjacent areas. The safest corner of the capital city is not safe from dengue attack because of dangerously breeding capability of mosquito to lay eggs and reproduce in clean and neat available water reservoirs. The situation can be worsening as there is no suitable treatment available for the dengue fever caused by this virus or an effective vaccine. Clinicians mainly treat dengue fever patient's symptoms and boosting the immunity, thus halting the progression of viral infection to its haemorrhagic state. As excessive bleeding internally as well as externally is considered quite dangerous as far as the health outcomes are concerned in severe stages of dengue fever. Nations across the world having winter temperature, not below ten degrees centigrade/55-degree Fahrenheit that constitute almost one-half of the world is at risk of dengue virus spread<sup>2</sup>. Some are still safe, whereas, others like Pakistan have become a breeding ground for this mosquito posing a health risk to the entire nation. As such, country like other parts of the world, must live with this virus infection through prevention and control measures against mosquito the main culprit for dengue virus transmission from human to human<sup>3</sup>.

Field Epidemiology and Disease Surveillance division of Ministry of Health (MoH) urge to step up dengue surveillance, case management and outbreak response in primary health facilities and hospitals, as well as through community and school-based health education campaigns, clean-up drives, surveillance activities, case investigations, vector control, and logistics support for dengue control (insecticides, rapid diagnostics tests, medicine, etc.). In view of the resource constraints from the Government side and rising trend of Dengue, PRCS has been requested by the Ministry of National Health Services and Coordination to support the Government of Pakistan to deal this emergency in Pakistan with particular focus on Rawalpindi and Islamabad.

Department of Malaria Control Program contacted Pakistan Red Crescent Society (PRCS) to aid in raising awareness, provision of mosquito nets to isolate confirm and suspected patients to prevent further spread and to protect vulnerable population from mosquito bite during daytime. This population includes pregnant women (PW) and <5 children and elderly people. However, as per the DoMC guideline main focus will be on personal protection, cleanliness of environment and use of repellants as it not only provides protection for more than eight hours but also easy to use at day time and create a zone of protection for more radius than bed nets<sup>4</sup>. Printing materials and setting up mobile health

<sup>1</sup> <https://www.nih.org.pk/wp-content/uploads/2019/09/36-FELTP-Pakistan-Weekly-Epidemiological-Report-Sept-02-08-2019-.pdf>

<sup>2</sup> <https://www.cdc.gov/dengue/areaswithrisk/index.html>

<sup>3</sup> <https://www.who.int/news-room/fact-sheets/detail/dengue-and-severe-dengue>

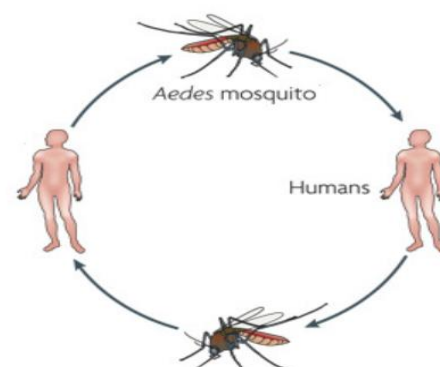
<sup>4</sup> [http://dmc.gov.pk/documents/pdfs/Dengue\\_Vetcor\\_control.pdf](http://dmc.gov.pk/documents/pdfs/Dengue_Vetcor_control.pdf)

teams in the urban slums of Rawalpindi-Islamabad area as preventive strategy for twin cities and subsequent reduce burden of disease. Role of Mobile Health Teams is provided below under activity section.

### Disease Scenario and effectiveness of different Protective measures

Disease Scenario	SIRS <sup>1</sup>	LLINs	Personal protection			Larval control		Fogging	
			Repelents	Cloth treatment	Screening	Chemical	Source reduction	Indoor	Outdoor
Malaria	++++	++++	+	+	+++	++++	+++	++	+
Dengue	+	++	++++	++++	++	++	+++	++++	++

*Aedes aegypti* and *A. albopictus* have been considered major vectors of dengue in Southeast Asia including Pakistan. Both species have been closely associated with human dwellings due to its breeding preference for clean water domestic habitats. Similarly, both species also exhibit a discernible demarcation in occurrence in different geographical areas of country. Disease prevalence is likely to happen in the capital region because of presence of both types of vectors but dominance of *A. aegypti* while *A. albopictus* also shows reasonably high densities. Following figure reflects geographical distribution of both vectors in different parts of the country and presence of both type of vectors can be seen in ICT region.



Vector Transmission Cycle. (Source: DMC Pakistan)

In addition to presence of vectors frequent travel between twin cities and adjacent areas, population growth in the peripheral areas of Islamabad where improper sanitation facilities and ineffective mosquito control measures area available and in addition to that minimum disease surveillance and official reporting of cases is also a threat of prevalence to other adjacent areas. Provision of LLIN, repellent, awareness raising at community and educational institute level through this project activity aims to control spread and aware vulnerable communities about the control and preventive measures of vector transmission. Dengue virus spread through a human-to-mosquito-to-human cycle of transmission and a person develop viremia after four days of being bit by an infected *Aedes aegypti* mosquito. In viremia stage, infected person develops high level of dengue virus in the blood. The condition lasts for approx. five to 12 days. Person remain asymptomatic on the first day of viremia and develop symptoms after five days which lasts for 12 days minimum. A mosquito feeds on the blood of someone infected with the dengue virus becomes a dengue vector. The mosquito must take its blood meal during the period of viremia, when the infected person has high levels of the dengue virus in the blood. Once the virus enters the mosquito's system in the blood meal, the virus spreads through the mosquito's body over a period of eight to twelve days. After this period, the infected mosquito can transmit the dengue virus to another person while feeding. Once infected with dengue, the mosquito remains infected with the virus for its entire life and can continue transmitting the dengue virus to healthy people for the rest of their life spans, generally a three- to four-week period<sup>5</sup>.

The worse hit areas of moon soon rains are urban slum areas in Rawalpindi and Islamabad from where major number of cases are being reported to public hospitals. This a precarious situation and need an immediate attention as far as its control is involved. Disease recurrence and potential to harm everyone in the city and adjacent areas. The safest corner of the capital city is not safe from dengue attack because of dangerously breeding capability of mosquito to lay eggs and reproduce in clean and neat available water reservoirs. The situation can be worsening as there is no suitable treatment available for the dengue fever caused by this virus or an effective vaccine. Clinicians mainly treat dengue fever patient's symptoms and boosting the immunity, thus halting the progression of viral infection to its haemorrhagic state. As excessive bleeding internally as well as externally is considered quite dangerous as far as the health outcomes are concerned in severe stages of dengue fever. As such, country like other parts of the world, must live with this virus infection through prevention and control measures against mosquito the main culprit for dengue virus transmission from human to human.

According to the recent census, total population of Islamabad is 2,851,863 and out of which 2,642,688 (93 per cent) lives in the peripheries of Islamabad. None of the WHO recommended strategies are in place in Islamabad and Rawalpindi to wiping out of egg laying places of mosquito through water control, proper covering of water for domestic usage and outdoor in the lawns, using insecticides and fumigating the areas. Considering the situation, Department of

<sup>5</sup> <https://www.nature.com/scitable/topicpage/dengue-transmission-22399758/>

Malaria Control Program contacted Pakistan Red Crescent Society (PRCS) to aid in raising awareness, provision of mosquito nets, printing materials and setting up mobile health teams in the urban slums of Rawalpindi-Islamabad area as preventive strategy for twin cities and subsequent reduce burden of disease.

Monsoon rains will last until October and there is likelihood of epidemiological threat of the dengue virus in the neighboring districts. Even for the Chikungunya and Malaria, the vector remains the same i.e. mosquito and measures carried-out to stop the multiplication of mosquitoes will have a positive effect in controlling the spread of not only Dengue but also the other high prevalent diseases in the area.

Similarly, this is an opportunity for PRCS to raise Public Health awareness among the general public through its vast volunteer social network and to prevent the disease prevalence. PRCS aims to support the department of Health with awareness raising with in the vulnerable community residing in the peripheries of Rawalpindi and Islamabad. The screening camps along with the awareness campaigns in Rawalpindi-Islamabad will help in limiting the spread of Dengue through enabling people adopt healthy practices like understanding the issue and adopting protective measures.

Nevertheless, preparedness is an important component to deal with any disease outbreak and prepared communities will cope better with any emergency. PRCS, being auxiliary to the government, will have to be proactive and ready in terms of staff, volunteers, resources and mechanisms to carry-out the response in a smooth and organized manner. PRCS has successfully established coordination and communication channel with all RCRC Movement partners to respond spread of Dengue Control Support program on the request of Ministry of Health to PRCS.

## Summary of current response

### Overview of Host National Society

<b>30 September 2019</b>	<ul style="list-style-type: none"> <li>Ministry of National Health Services Regulation and Coordination (NHSRC) of Pakistan requested assistance from PRCS to support the ongoing dengue outbreak in twin cities.</li> </ul>
<b>1 October 2019</b>	<ul style="list-style-type: none"> <li>PRCS conducted meeting with DoMC and NHSRC to discuss required support and assistance by establishing coordination with DoMC to assist in dengue case management.</li> <li>Finalized standard contents/Health messages for community awareness in consultation with DoMC.</li> </ul>
<b>2 October 2019</b>	<ul style="list-style-type: none"> <li>Submitted DREF application to IFRC of 117,947 CHF to support 210,270 beneficiaries in identified hotspot areas of Islamabad and Rawalpindi to control further prevalence.</li> </ul>

The table below details the activities will be conducted by PRCS in Islamabad and Rawalpindi districts from October to December 2019.

Activity	Unit	Total number reached
Dengue Larval source management (LSM) campaign, IEC material distribution and awareness raising – door to door visit	Households	28,800
Dengue Larval source management (LSM) campaign, IEC material distribution and awareness raising – School/College/Universities	Students	20,000
Dengue Larval source management (LSM) campaign, IEC material distribution and awareness raising - hospitals.	Patients/attendants	3,000
Distribution of repellent among patients in Hospital (150 patients x 20 hospitals in two districts)	patients	3,000
Distribution of repellent among community members (1.5XHH depends on family size)	Household	46,200
Distribution of Long-Lasting Insecticide treated Bed Nets (LLINs)	Patients	3,000
Mobile Health Team using the Ambulances with technical staff deployment in hotspot areas of twin cities to provide diagnostic and case management services at community level.	Screening of all suspected cases	3,000
Orientation/Capacity building of 70 Community Based volunteers by DoMC	CBVs	70
Information Dissemination workshop with all stakeholders to share and learn from each other experiences, lesson learnt, effective community engagement strategies and risk communication approaches. Resource mapping and land mapping of all stakeholders. PRCS Dengue Cell will also be launched on that day	PRCS, IFRC, DoMC, NHSRC, Private Practitioners, District Health Authorities, UN agencies, NGOs and INGOS	150

\*LSM Campaign: This includes door to door, school/college and University visits, Hospitals visits in hot spot areas to raise awareness about larva source cleaning methods and protective measures to control spread.

At national level, PRCS has represented in high level meetings organized by the Ministry of Health to plan, review and coordinate dengue control activities. At branch/district level, the respective PRCS branch staff are in frequent coordination with the Regional Directors of Health services and district level health counterparts of the government. At community level, PRCS volunteers are working hand in hand with the Medical Officer of Health (MoH) teams mobilized for dengue control activities.

### Overview of Red Cross Red Crescent Movement in country

PRCS is the leading Humanitarian organization in the country with well-established headquarters, provincial and district branches, transparent procedures and mechanisms, very good acceptance in the community and a volunteer-base with deep access into the communities along with the support from the other RCRC Movement partners in the country. The Health and Care department of PRCS with staff and volunteers at all levels works closely with the government authorities as well as with other departments of the organization to respond to any major situation compromising the health of the population. The staff and volunteers are well trained and equipped with all the necessary tools (IEC Materials, reporting formats, visibility materials etc.) and mechanisms for monitoring are well established enabling PRCS to play its role as an effective and efficient auxiliary to the government. PRCS has been requested to assist the government in responding to the situation filling-in the gap in terms of service delivery to the affected and vulnerable population. The interventions (Screening Camps and Awareness Campaigns) by PRCS have been acknowledged by the local authorities and requested to continue till the situation is under complete control.

Alongside the International Federation of Red Cross and Red Crescent Societies (IFRC), other RCRC Movement partners in the country including International Committee of the Red Cross (ICRC), Danish Red Cross, German Red Cross, Norwegian Red Cross, Turkish Red Crescent and UAE Red Crescent are well connected, and coordination and cooperation is ensured through frequent communication and information sharing.

The IFRC has a Country Office in Pakistan and receives technical support, when needed, from the Asia Pacific Regional Office in Kuala Lumpur, who have been kept in loop regarding sharing the information and updates. Continuous guidance has been provided by the APR Office with regards to how to proceed further. IFRC has also supported PRCS in preparing EPoA for this response operation along with the budget.

### Overview of non-RCRC actors in country

An expert team from the World Health Organization (WHO) submitted a report to the Ministry of Health on sustainable solutions to the dengue outbreak. It consists of a strategy to reduce the current dengue mosquito density and the number of dengue patients in the country by 50 per cent within a period of four weeks. According to WHO strategies for prevention and control relies on reducing the breeding of mosquitoes through source reduction (removal and modification of breeding sites) and reducing human–vector contact through adult vector control measures. Both control measures need to be implemented simultaneously for effective control. Based on expert teams' recommendations the triage protocol was to assist with better management of the patients in the health facilities.

The corporate sector is also involved in dengue control activities with the widespread distribution of key messages on dengue prevention and control via print and social media.

## Needs analysis, targeting, scenario planning and risk assessment

### Needs Analysis

Heavy monsoon rains, rain-soaked garbage dumps, standing water pools and other potential breeding grounds for mosquito larvae attribute to the higher number of dengue cases reported in identified hotspot areas of Rawalpindi and Islamabad including both urban and suburban areas. Additionally, frequent travel of local community from capital city to adjacent areas pose a high risk of viral transmission. For early detection and action there is a gap in community-based information gathering system related to Dengue and addressing its cure/prevention.

### Targeting

Targeted people				
Outcome	Timeframe	Target areas	People reached	
			Unit	No. of people
Mosquito density in the targeted communities are reduced due Dengue Larval source management (LSM) campaign, IEC material distribution and awareness raising among communities and utilization of young population as change agent for healthy, hygienic, self and environment protection practices. (6.5people/28,800HH and 20,000 students of schools, college and universities)	2 months	2 districts	Person	207,200
Volunteers support for Dengue case management, IEC material distribution and awareness raising	1 months	2 districts	Person	70

The risk of dengue transmission of the target community is reduced by raising awareness and protection through health risk communication campaign in hospitals and community during HH visit and Mobile Health teams (LLIN, Repellent in hospitals and community for suspected/treated cases and protection respectively)	2 months	2 districts	Person	49,200 (43,200 repellents to HH, 3,000 to patients, +3000 LLIN to patients)
Early detection and early action due to community-based surveillance/ diagnosis and management in hotspot areas of two districts.	2 months	2 districts	Person	3000

## Scenario Planning

Status	Effect/Needs	IFRC response
Dengue prevention and management efforts require PRCS to undertake public information dissemination and social mobilization campaigns to ensure ingrain good practices by the communities like cleanliness drive, adequate clothing during daytime.  PRC chapters' capacity needs to be enhanced: in terms of logistics, task shifting of the volunteers and social mobilization for cleanliness drive, health promotion and environmental interventions are supported at the local level	Medium humanitarian needs	DREF
Cases of dengue continues to increase from Islamabad and Rawalpindi areas, including population residing in the adjacent villages to both cities. Health infrastructure and support is low in these areas, whereas the impact of disease outbreak can prevail to entire area due to frequent travel between both cities and its adjacent areas. The District Authorities have declared its an emergency situation and requested PRCS to support and minimize gaps.  More areas will be left out from public health safety nets that need immediate stabilization and long-term dengue prevention and management services.  Health facilities and public health institutions are overwhelmed due to huge influx of active dengue cases.	High humanitarian needs	DREF

## Risk assessment

Each Dengue outbreak depicts gaps in risk communication targeted for behavioral change. Therefore, different strategies will be used to communicate risk during the outbreak. Effective risk communication is useful not only during outbreak response but also during outbreak preparedness and prevention of occurrence of the next peak. Risk communication becomes especially important in the post outbreak period which is a grace period given by nature to prevent the emergence of the next outbreak.

## B. Operational strategy

### Overall objective

The objective is to reduce the morbidity and mortality of the targeted population due to Dengue during the project period. The project targeting 187,200 (6.5 person per household) direct beneficiaries and 468,000 indirect beneficiaries, who are living in high risk and high-risk districts, by outbreak of dengue in Pakistan. The operation will be implemented over a three-month period.

Through the planned/proposed DREF it is intended that PRCS will assist the government health department in screening of patients as well as create awareness amongst the general population in hotspot areas. In addition, PRCS also aims at limiting the spread of Dengue and saving the most vulnerable population through the provision of LLINS and Mosquito-repellents, diagnosis and case management at community level.

### Proposed strategy

As per our discussion with the DoMC as representative of NHSRC, it has been decided that PRCS' main strength is its strong community network and acceptability within the setups. Therefore, PRCS will use its existing Y& V department to build capacity/ orientation of 70 Community Based Volunteers on prevention and control strategies to control disease spread and subsequent make community resilient to respond themselves in any emergency with the support of DoMC. PRCS will work in close coordination with the Health Department, Administrative authorities of Twin cities and Malaria Control Program. Also, PRCS will ensure gender mainstreaming during entire phase of response. Awareness activities will be conducted through CBVs to household levels, school/Colleges/Universities and Hospital level and will diagnose and manage expected cases of dengue fever. Mosquito repellent, LLIN and IEC material will be distributed during HH visits, to patients visiting for diagnosis and treatment and hospitalized ones.

All these activities will be conducted in the months of October and November, once the activities are completed, all the remaining kits and IEC materials would be handed over to the respective MoH for utilization in future. PRCS will keep a close liaison and keep monitoring the progress. An information sharing workshop will be arranged for experience sharing, lesson learnt, way forward with all stakeholders and partners at the end of the operational timeframe.

### Key districts to be supported by DREF operation MDRPK017

The selection of the districts is based on epidemiological evidence and gaps in services and activities. Based on the number of Dengue cases reported in 2019, 2018 and 2017. Following identified hot spot areas by NHSRC in two districts comes under moderate risk category. Daily case receiving from these areas is attached as [annex 1](#).

Rawalpindi	Islamabad
Dhoke Munshi	Sector G/6
Rehmat Aabad	Sector G/7
Kotha Kalan	Sector G/8
Morgah	Sector G/9
Dhama Syedan	Sector F/6
Gangal	Sector F/7
Dhamial	Sector I/9
Allama Iqbal Colony	Sector 1/10
Ahmed Abad/ Azizabad	Sector I/8-1
Kamalabad	Sector Rawal Town
Tench Bhatta	
Westridge	
Chammanzar	
Rahemabad	
Dhoke Farman Ali	
Dhoke Chiragh Din	
Dhoke Hassu	

Following are the main interventions identified - depending on the needs and on-ground situation, PRCS response to this outbreak will be mainly based on following activities.

1. PRCS, with the technical support of DOMC, will arrange orientation of 70 community-based volunteers for awareness raising and prevention against dengue virus to prevent further spread of the disease in addition to support for timely diagnosis, treatment, safe waste disposal practices and effective use of disposal system provided by the district authorities.
2. IEC material will be developed and printed in consultation with DOMC. This IEC material will contain key messages regarding prevention and treatment of Dengue fever in easily understandable local language for better understanding of the communities. This is intended to develop resilient communities.
3. CBVs will conduct door to door awareness campaign to raise awareness and distribute IEC material with standard key messages. (50,000 brochures, minimum of 1 per HH). Teams of volunteers and staff members, during this awareness campaign will visit estimated 28,800 HHs and Schools/ colleges and Universities (20,000 students) in two months period raising awareness and improving knowledge of people on how to prevent themselves from Dengue fever reducing morbidity and mortality.
4. Protective mosquito repellent will also be distributed to target population i.e 1/2 mosquito repellent bottles each HH and in hospitals (28,800 HH x 1.5, 150 patients x 20 hospitals). As requested by DOMC, considering the significant role of mosquito repellent in prevention from Dengue fever, PRCS teams will distribute at least 1 to 2 bottles (1/2x50ml) per HH.
5. Long Lasting Insecticides Nets (LLINs) will be distributed to hospitals catering major workload of Dengue patients in Rawalpindi and Islamabad. (3000). LLIN distribution will prevent further spread from positive patients after hospital discharge. Distribution criteria will be vulnerable population i.e PW and <5 children and elderly people.
6. Health education will be provided to the community members and in hospitals for effective use of LLIN. The Mosquito repellent, LLIN and IEC material will be distributed during HH visits, to patients visiting for diagnosis and treatment and hospitalized ones as per the criteria i.e. PW, <5 and elderly people.
7. Mobile Units will be established using PRCS Ambulances with technical volunteers, diagnostic kits and necessary medicines (Paracetamol only) for managing dengue patients. eight ambulances each with four teams of two trained volunteers will be deployed in field for a period of two months after orientation by DOMC. In addition to awareness campaign these teams would also conduct

screening tests for dengue through Rapid Diagnostic Screening kits for suspected cases. On request of DOMC/MoH, tablets Paracetamol would also be available with these teams for prescription to already diagnosed dengue patients in the community. Case management criteria will vary based on screening results. Positive cases will be referred to hospital with paracetamol as cover until they go to hospital. PRCS also aims to refer these patients to their own blood bank from where they can get blood plasma on subsidiary rates or fee of cost if required.

All these interventions have been planned based on the requests from the DOMC and MoH and will be executed through PRCS staff and volunteers in collaboration with the government authorities.

IFRC and PRCS will develop key messages in coordination with MoH, DoMC and WHO and disseminate them through context appropriate channels. These include posters, brochures, billboards, social media and direct messages carried by volunteers.

During this process, a six-step COMBAT model for community engagement for the prevention and control of the *Aedes aegypti* vector-borne diseases<sup>6</sup> will be used to implement volunteer action in risk communication (awareness and perception and behavior change):

1. Creating awareness and felt need in community
2. Organizing community action teams
3. Meeting to finalize community engagement plan and conduct capacity building
4. Bring resources together
5. Activate the plan, ensure communication leads to required actions
6. Track progress and ensure feedback into the process.

The PRCS Communication Department will spearhead the overall risk communication campaign for the dengue response and prevention programme with the support from DoMC. The risk communication will be aimed at in 3 levels: The grass-root level, the regional level and national level.

At the grass root level, volunteers will aim at going door to door and work with people to change practices towards keeping their environment clean and continue to do so. One of the problems faced by communities and one of the key factors where the dengue crisis continues to hit communities is when they fail to continuously attend to keeping their environment clean. When monsoonal rains come (in erratic patterns in the past few years), communities face a crisis by not consistently keeping their surroundings clean. Hence this campaign will aim at ensuring that the message of cleaning one's environment will be met all year around. Another focus would be as to educate people on how to identify dengue symptoms and to take precautionary measures from the onset. Village level meetings in high-risk communities will also be held to ensure that communities come together to face this crisis.

In the regional scale, the focus will mainly be on educating school children in the district. Several schools, Colleges and University will be identified, and children/Young population will be trained and tasked with keeping their environment clean, and monitoring/identifying breeding sites. IEC material and Dengue guidelines in partnership with the MoH, with educative information along with specific tasks will be provided to these students whereas they must ensure keeping their surroundings within the schools/colleges/universities are kept clean and risk-free of Dengue. Teachers are tasked with monitoring the students who do a good job and will be rewarded accordingly.

### **Community based surveillance**

Pakistan has a well-established health institution-based disease surveillance system. The proposed Community-based surveillance system (CBS) will complement the existing health institution-based disease surveillance system through improving the early detection and early response to outbreaks at the community level. At present, there is no well-established CBS in the identified districts. The current Dengue outbreak has clearly demonstrated the need for a well-functioning CBS. The present surveillance system is a health institutional based disease surveillance system. The link between the health institution and community is missing to identify early and react early before blowing in the epidemic proportions. A Such CBS system could be useful not only during current Dengue outbreak, but also during future Dengue and other disease outbreaks as well.

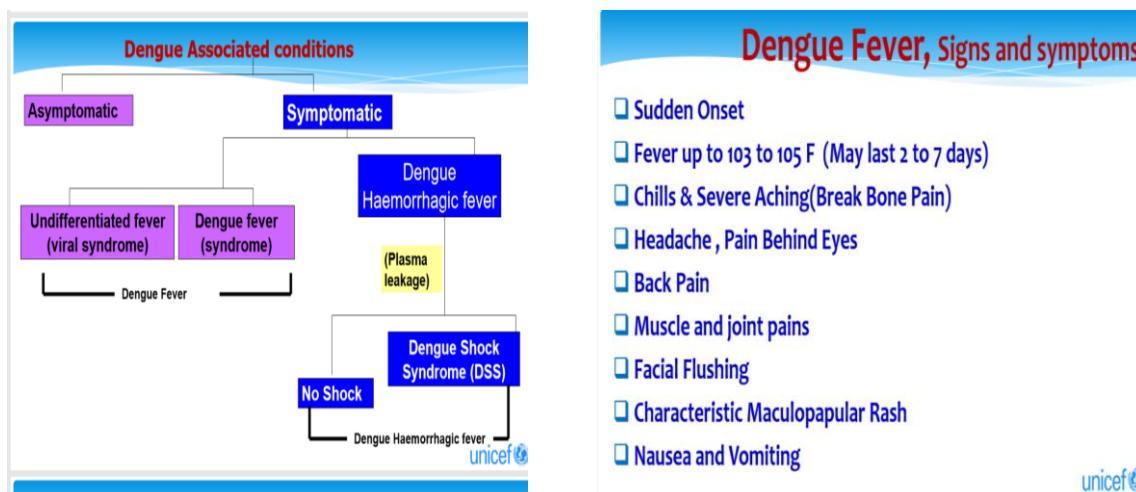
Pakistan Red Cross Society through its well-established volunteer network has the necessary capacity to establish and maintain a CBS system. With large number of Dengue patients and high level of in-country movement of people, imported cases of Dengue could give rise to Dengue outbreaks in areas where the disease outbreak is not operating at present. Hence it is vital to pick up such cases at very early stages to curtail the expansion into a widespread outbreak.

During this period, this community-based surveillance system will be implemented in two district branches. A team of 35 community volunteers in each district will be trained on establishing Community-Based Surveillance System. Since the outbreak is already occurring, they will be engaged in active case-finding using community case definition agreed with

<sup>6</sup> UNICEF (2017) Risk Communication Guide for Zika Virus Dengue / Chikungunya. Available Online: [http://www.unicefrosa-progressreport.org/attachments/Risk\\_CommunicationGuideforZika.pdf](http://www.unicefrosa-progressreport.org/attachments/Risk_CommunicationGuideforZika.pdf)

the health facilities/MoH. Trained volunteers will be trained on DoMC guidelines to identify suspected cases and will refer to the ambulances present in these areas for screening. Positive cases will be referred to nearest hospital. Community-based surveillance will be carried out on these activities/issues:

1. Confirmed dengue cases.
2. Suspected cases based on the community case definition.
3. Deaths due to dengue.
4. Mosquito breeding sites.
5. Garbage dumps.
6. Cleaned up area.
7. Number of people reached by CBS volunteers with community education on dengue.
8. Number of households visited reached by CBS volunteers.



UNICEF (2017) Risk Communication Guide for Zika Virus Dengue / Chikungunya. (Source: UNICEF)

## Operational support services

### Human resources

National Headquarter, National Health Manager will overall monitor and support the operation through response focal person at the PRCS.

No new paid staff will be engaged for this operation. Implementation will be supported by volunteers (around 70 professional volunteers) and staff members existing in PRCS.

An RDRT will be deployed for the operation to assist the National Society with implementation and monitoring of planned activities ensuring their compliance with the agreed standards. The RDRT will have regular meetings with all the stakeholders and field visits where possible.

PRCS has experience and capacity of handling similar outbreaks during previous years. Hence, considering the situation, there is a need for PMER RDRT deployment for this intervention.

### Logistics and supply chain

Logistics activities aim to effectively manage the supply chain, including, local procurement, fleet, storage and transport of relief items to distribution sites in accordance with the operation's requirements and aligned to IFRC's logistics standards, processes and procedures. The PRCS logistics will take lead on the logistics response to this operation, with the support by IFRC CO logistics team.

Mosquito nets (LLIN's) required in immediate response are already available in PRCS stocks and will be replenished locally upon approval of this DREF. Mosquito repellent will also be procured by PRCS through its emergency procurement SOPs, which is expected to take approximately 10 working days. PRCS will be responsible for transportation of relief items to distribution sites by using their existing fleet.

The IFRC Operational Logistics, Procurement and Supply Chain Management Unit (OLPSCM) in Kuala Lumpur will extend its technical support to PRCS and IFRC CO as needed.

### Communications

The PRCS will regularly share information and updates on the operation with key stakeholders through its Health and

Communications departments. The National Program Coordinator will be responsible for communication to external stakeholders. At the operational level, the communication department will undertake communication activities aimed to increase visibility of the PRC and to show impact of our contribution, with IFRC support.

### **Security**

The PRCS staff and volunteers are quite familiar with the local security situation, norms and culture as well as RCRC Movement security regulations and comply by those. The PRCS and IFRC security units are in constant watch over the security situation especially in the areas where RCRC staff and volunteers are engaged in response activities and are regularly sharing the information and advice with all the concerned. Teams are familiar with the proposed operational areas and have been advised on the current acceptance and acceptability of these locations. Once in the field, staff have been advised to take note of the security environment and report back on road conditions, acceptability of the organization in the target areas as well as any other matter related to the security and safety. Before embarking on field visits, all staff will be briefed on safety protocols. Any security concerns will be handled with local authorities as per the existing security framework. Mass media and other communication channels will be used to monitor the situation.

### **Planning, monitoring, evaluation and reporting (PMER)**

Monitoring of the response activities will be done by PRCS and IFRC Health personnel from NHQ levels to guarantee compliance with the agreed framework and adherence to the standard working guidelines. These monitoring visits will be followed by field visit reports. Also, the activities will be reported to all the concerned through periodic updates/reports on the standard formats. The monitoring and reporting of the DREF response activities will be conducted in coordination with PRCS PMER department at NHQ levels.

PRCS is overseeing all operational, implementation, monitoring and evaluation, and reporting aspects of the present operation in the affected area through its country-wide network of branches and volunteers. IFRC, through APRO is providing technical support in operation management to ensure the operation objectives are met. Additionally, IFRC is providing technical support to the PRCS for the preparation of DREF request and updates.

Operation updates are done providing necessary information in relation to the progress of the operation, any changes in the situation during the reporting period, and any problems, constraints or unmet needs. A final report on the operation will be made available three months after the end of the operation.

### **Administration and Finance**

For the administrative and financial issues related to the operation PRCS and IFRC administration and finance departments will be consulted in order to ensure smooth running of the response operation and transparency.

## C. Detailed Operational Plan



### Health

**People targeted: 210,270**

**Male: 103,032**

**Female: 107,238**

**Requirements (CHF): 65,300**

**Needs analysis:** Heavy monsoon rains, public failure to clear rain-soaked garbage, standing water pools and other potential breeding grounds for mosquito larvae attribute to the higher number of cases reported in identified hotspot areas of Rawalpindi and Islamabad including both urban and suburban areas. Frequent travel from capital city to adjacent areas pose a high risk of viral transmission. For early detection and action there is gap in community-based information gathering system related to Dengue.

**Population to be assisted:** All affected people.

- 187,200 people will receive awareness during door to door visit through IEC material (6.5x HH).
- 3000 patients and their attendants will receive awareness during hospital visits (150 patients x20 hospitals visit).
- 20,000 students will receive awareness during school/college and university visits in high-risk population from 2 districts (12,50 student x 16 educational institutes) (This include, posters, brochures, and direct messages carried by volunteers. (Direct message reach= 210,270; Indirect Reach= 525675)
- Half a day orientation for 70 CBVs volunteers on awareness raising and dengue vector breeding sites, operational details and reporting systems.
- 3,000 patients will receive repellent in hospitals (150 patients x 20 hospitals)
- 43,200 people will receive repellents in community (1.5x 28,800).
- 3,000 people will receive LLIN, discharged from hospitals.

**\*Total protective measures will be received by 49,200 people (LLIN, Repellents)**

- 3000 suspected cases will be screened and managed during mobile health team visit in hotspot areas of two districts.

**\*Total 3000 cases will be diagnosed and managed at community level.**

**Programme standards/benchmarks:** A few measures will be taken in order to ensure that the operation will comply with the minimum standards for protection, gender and inclusion in emergencies.

P&B Output Code	<b>Health Outcome 1: The risk of dengue transmission is reduced by raising awareness through health risk communication campaign (target population 212,000)</b>	<i>28,800 households with reduced chances of transmission of dengue</i>
	<b>Health Output 1.1: Target population is provided with information on dengue transmission and prevention</b>	<i>210,270 vulnerable people that are sensitized on dengue transmission and prevention.</i>

	Activities planned	Month	1	2	3			
AP022	Production of IEC material (leaflets, posters, videos etc.)		x	x	x			
AP022	Orientation/Capacity building of 70 CBVs on IEC material, LSM campaign, surveillance and case reporting		x	x				
AP022	Dengue Larval source management (LSM) campaign, IEC material distribution and awareness raising – door to door visit		x	x				
AP022	Dengue Larval source management (LSM) campaign, IEC material distribution and awareness raising – School/College/Universities		x	x				
AP022	Dengue Larval source management (LSM) campaign, IEC material distribution and awareness raising - hospitals.		x	x	x			
<b>P&amp;B Output Code</b>	<b>Health Output 1.2: NS develop the capacity to assess and provide relevant long-term health care support to vulnerable households</b>	<i>3,000 patients that have received LLIN and information on its proper use. 46,200 vulnerable people that have received repellents and its use.</i>						
	Activities planned	Month	1	2	3			
AP022	Distribution of LLIN and education on proper use of LLIN		x	x	x			
AP022	Replenishment of LLIN			x	x			
AP022	Distribution of Mosquito Repellent		x	x	x			
<b>P&amp;B Output Code</b>	<b>Health Output 1.2: Community based surveillance implemented</b>	<i>8 weekly surveillance reports submission from both districts 3 coordination meetings with the CBVs team and MoH staff</i>						
	Activities planned	Month	1	2	3			
AP011	Coordination and reporting mechanism with MoH agreed upon		x					
AP011	Weekly community surveillance visits and reporting		x	x	x			
AP011	Monthly coordination meetings with the CBVs team and the MoH local staff		x	x	x			
<b>P&amp;B Output Code</b>	<b>Health Output 1.3: Dengue case management strengthened</b>	<i># of schools strengthened for dengue case management (Target: 16 i.e.12 schools, 2 colleges and 2 universities).</i>						
	Activities planned	Month	1	2	3			
AP022	Educational sessions in schools		x	x	x			
AP022	Setting up school dengue circles		x	x	x			
AP022	Promote sustainable dengue free school concept and set up an appreciation mechanism		x	x	x			
<b>P&amp;B Output Code</b>	<b>Health Output 1.4: Hospitals supported through volunteers</b>	<i>3,000 cases managed through volunteers at hospitals</i>						
	Activities planned	Month	1	2	3			
AP011	Selected volunteers for support in Mobile Health Team in Ambulances		x					
AP011	Distribute IEC materials through mobile health teams		x	x				
AP022	Screening of suspected cases		x	x	x			
AP022	Case management of positive cases		x	x	x			



## Water, sanitation and hygiene

People targeted: 210,270

Male: 103,032

Female: 107,238

Requirements (CHF): (integrated with other areas)

**Needs analysis:** Community is not aware about effective use and waste segregation of garbage bins provided by RDA (Rawalpindi Development Authority) and MCI (Municipal Corporation of Islamabad). Garbage bins are not being emptied on regular basis. In hospitals waste segregation is not controlled. Coordination concerned municipal authorities and awareness raising in community is required as to how these services can be used effectively.

**Population to be assisted:** All affected people.

- 187,200 people will receive awareness during door to door visit through IEC material (6.5x HH).
- 3000 patients and their attendants will receive awareness during hospital visits (150 patients x 20 hospitals visit).
- 20,000 students will receive awareness during school/college and university visits in high-risk population from 2 districts (1250 student x 16 educational institutes) (This include, posters, brochures, and direct messages carried by volunteers).
- Half a day orientation for 70 CBVs volunteers on awareness raising and dengue vector breeding sites, operational details, reporting system and waste management and how to build ownership in the community to clean their environment. (Direct message to be reached: 210,270; Indirect people to be reached: 525,675)

**Programme standards/benchmarks:** A few measures will be taken in order to ensure that the operation will comply with the minimum standards for protection, gender and inclusion in emergencies.

P&B Output Code	<b>WASH Outcome 1: Dengue-related water, sanitation and hygiene improved</b>	28,800 households provided information on solid waste disposal practices						
	<b>WASH Output 1.1: Solid waste disposal to prevent vector breeding</b>	210,270 people sensitized on waste segregation, disposal in hospitals and use of garbage bins						
	Activities planned	Month	1	2	3			
AP02	Awareness in community to use Garbage Bins properly provided by RDA (Rawalpindi Development Authority) and MCI (Metropolitan Corporation Islamabad)		x	x	x			
AP02	Awareness in community about waste segregation and disposal in hospitals		x	x	x			



## Protection, Gender and Inclusion<sup>1</sup>

People targeted: All people affected

Requirements (CHF): (integrated with other areas)

**Needs analysis:** While assessments are ongoing, PRCS is currently using assessment forms that facilitate the capture of gender disaggregated data to inform this relief operation. PRCS will deploy female volunteers during all stages of the operation including assessments, distributions, awareness activities and post-distribution monitoring in the communities.

**Population to be assisted:** All affected people.

**Programme standards/benchmarks:** A few measures will be taken in order to ensure that the operation will comply with the minimum standards for protection, gender and inclusion in emergencies.

P&B Output Code	<b>S1.1: National Society capacity building and organizational development objectives are facilitated to ensure that National Societies have the necessary legal, ethical and financial foundations, systems and structures, competences and capacities to plan and perform.</b>	<i>The operation demonstrates evidence of addressing the specific needs to ensure equitable access to disaster response services. (Target: Yes)</i>						
	<b>Output S1.1.4: National Societies have effective and motivated volunteers who are protected</b>	<i>NS ensures improved equitable access to basic services, considering different needs based on gender and other diversity factors. (Target: 1, PRCS)</i>						
	Activities planned	Month	1	2	3			
AP031	Support sectoral teams to include measures to address vulnerabilities specific to protection, gender and inclusion factors (including people with disabilities) in their planning		x	x				
AP031	Support sectoral teams to ensure collection and analysis of sex-age and disability-disaggregated data		x	x				

## Strategies for Implementation

Requirements (CHF): 45,448

P&B Output Code	<b>S1.1: National Society capacity building and organizational development objectives are facilitated to ensure that National Societies have the necessary legal, ethical and financial foundations, systems and structures, competences and capacities to plan and perform.</b>	# of NS branches that are well functioning in the operation						
	<b>Output S1.1.1: National Societies have effective and motivated volunteers who are protected</b>	# of volunteers involved in the operation provided with briefing/orientation (Target: 70) 1 Emergency Dengue Control Coordinator Centre established at PRCS-NHQ						
	Activities planned	Month	1	2	3			
AP048	Provide complete briefings and orientation to volunteers in disaster response, data collection and information management		x	x				
AP016	Establish NHQ Emergency Dengue Control Coordination Center		x					
P&B Output Code	<b>Outcome S2.1: Effective and coordinated international disaster response is ensured</b>	Does the operation demonstrate evidence of effective and coordinated international disaster response? (Target: Yes)						
	<b>Output S2.1.1: Effective response preparedness and NS surge capacity mechanism is maintained</b>	1 RDRT deployed						
	Activities planned	Month	1	2	3			
AP046	Deployment of RDRT - PMER				x			
P&B Output Code	<b>Output S2.1.2: Supply chain and fleet services meet recognized quality and accountability standards</b>	Procurement is carried as per Sphere and IFRC standards and items replenished in PRCS warehouses within the operation timeline. (Target: 100% compliance)						
	Activities planned	Month	1	2	3			
	AP084	IFRC country office provides procurement support as needed to the National Society's logistics unit for replenishment		x	x	x		
P&B Output Code	<b>Outcome S3.2: The programmatic reach of the National Societies and the IFRC is expanded.</b>	1 national appeal launched						
	<b>Output S3.2.1: Resource generation and related accountability models are developed and improved</b>	1 lessons learned workshop conducted						
	Activities planned	Month	1	2	3			
AP048	Post distribution monitoring				x			
AP048	Lesson learned workshop for DREF operations				x			

**DREF OPERATION**

05/10/2019

**MDRPK017 : Pakistan Dengue Outbreak**

<b>Budget Group</b>	<b>DREF Budget CHF</b>
Clothing & Textiles	6,000
Medical & First Aid	53,700
<b>Total RELIEF ITEMS, CONSTRUCTION AND SUPPLIES</b>	<b>59,700</b>
Transport & Vehicle Costs	2,000
<b>Total LOGISTICS, TRANSPORT AND STORAGE</b>	<b>2,000</b>
National Society Staff	3,908
Volunteers	30,800
<b>Total PERSONNEL</b>	<b>34,708</b>
Workshops & Training	2,600
<b>Total WORKSHOP &amp; TRAINING</b>	<b>2,600</b>
Travel	12,500
Information & Public Relations	5,100
Office Costs	100
Communications	40
<b>Total GENERAL EXPENDITURES</b>	<b>17,740</b>
Programme and Services Support Recovery	7,589
<b>Total INDIRECT COSTS</b>	<b>7,589</b>
<b>TOTAL BUDGET</b>	<b>124,337</b>

## Reference documents



Click here for:

- Previous Appeals and updates

## Contact information

**For further information specifically related to this operation please contact:**

### In Pakistan Red Crescent Society, Islamabad:

- Khalid bin Majeed, secretary general; phone: +92 51 925 0407; email: [sg@prcs.org.pk](mailto:sg@prcs.org.pk)
- Maqsood Akram, head of disaster response unit; mobile: +92 304 1030 376; email: [dd.response@prcs.org.pk](mailto:dd.response@prcs.org.pk)

### In IFRC Country Office, Islamabad:

- Dr Thomas Gurtner, senior management advisor/ interim head of country; mobile: +92 308 8888054; email: [Thomas.gurtner@ifrc.org](mailto:Thomas.gurtner@ifrc.org)
- Manzoor Ali, senior programme manager, mobile: +92 308 5559071; email: [manzoor.ali@ifrc.org](mailto:manzoor.ali@ifrc.org)

### In IFRC Asia Pacific Regional Office, Kuala Lumpur:

- Mohammed Omer Mukhier, deputy regional director; email: [mohammedomer.mukhier@ifrc.org](mailto:mohammedomer.mukhier@ifrc.org)
- Necephor Mghendi, head of disaster and crisis unit; email: [necephor.mghendi@ifrc.org](mailto:necephor.mghendi@ifrc.org)
- Vinod Muniandy, operations coordinator; email: [vinod.muniandy@ifrc.org](mailto:vinod.muniandy@ifrc.org)
- Rosemarie North, communications manager; mobile: +60 12 230 8451; email: [rosemarie.north@ifrc.org](mailto:rosemarie.north@ifrc.org)

### For IFRC Resource Mobilization and Pledges support

- Alice Ho, resource mobilization in emergencies coordinator; email: [alice.ho@ifrc.org](mailto:alice.ho@ifrc.org)

### For planning, monitoring, evaluation and reporting (PMER) enquiries:

- Liew Siew Hui, PMER manager; email: [siewhui.liew@ifrc.org](mailto:siewhui.liew@ifrc.org)

### In IFRC Geneva:

- Nelson Castano, manager, operations coordination, email: [nelson.castano@ifrc.org](mailto:nelson.castano@ifrc.org)

## How we work

All IFRC assistance seeks to adhere to the Code of Conduct for the International Red Cross and Red Crescent Movement and Non-Governmental Organizations (NGO's) in Disaster Relief and the Humanitarian Charter and Minimum Standards in Humanitarian Response (Sphere) in delivering assistance to the most vulnerable. The IFRC's vision is to inspire, encourage, facilitate and promote at all times all forms of humanitarian activities by National Societies, with a view to preventing and alleviating human suffering, and thereby contributing to the maintenance and promotion of human dignity and peace in the world.

The IFRC's work is guided by Strategy 2020 which puts forward three strategic aims:



**Save lives,**  
protect livelihoods,  
and strengthen recovery  
from disaster and crises.



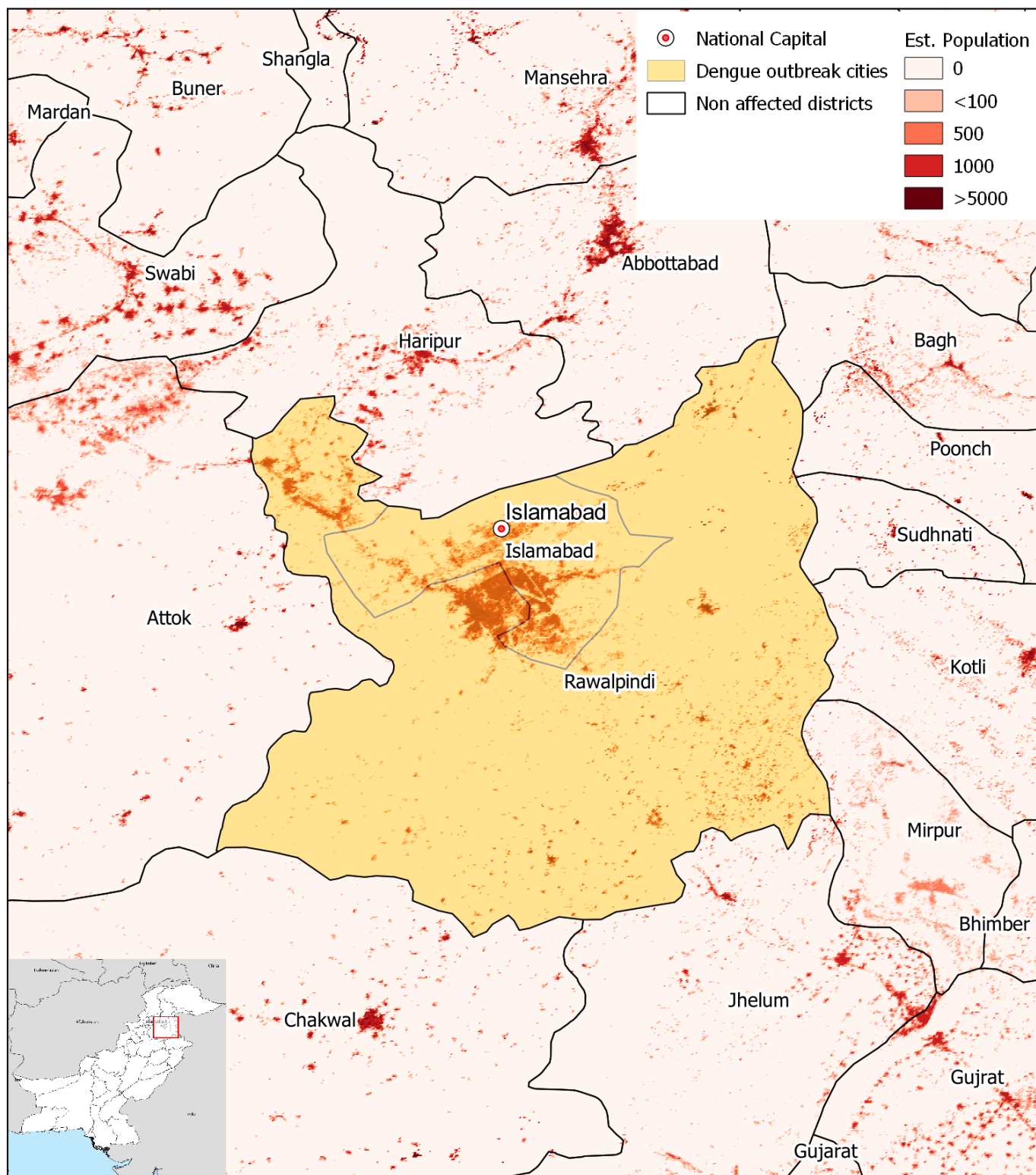
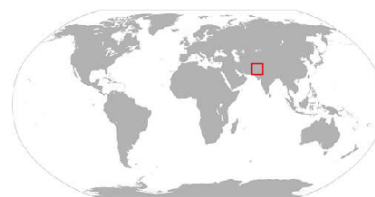
Enable **healthy**  
and **safe** living.



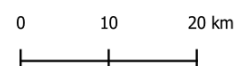
Promote **social inclusion**  
and a culture of  
**non-violence** and **peace**.

**Pakistan, Dengue Outbreak:  
DREF**


5 October 2019




The maps used do not imply the expression of any opinion on the part of the International Federation of the Red Cross and Red Crescent Societies or National Societies concerning the legal status of territory or its authorities. Map data sources: OCHA, OSM Contributors, GDACS, ICRC, IFRC



## Annex 1



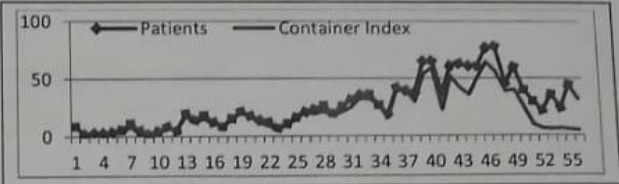
**METROPOLITAN CORPORATION ISLAMABAD**  
**DIRECTORATE OF HEALTH SERVICES**



No. MCI/DHS-14(1)(66)/2019/ Islamabad October 01, 2019

From: Director General Health  
DHS MCI, Islamabad

To: The Secretary Health  
M/o NHSR&C  
Islamabad



**Subject: DAILY DENGUE REPORTING (Humidity: 56 - 60%, Temp: 20 - 31°C)**


Dengue situation in sectoral areas of Urban Islamabad is as below:

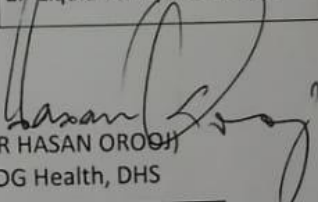
Daily Activity											Spray & Fog Done
Surveillance					Case Response						
Date	Week	Samples Taken today	Samples +ve for Aedes today	Dengue Cases today	No. of patients reported from sectors	Larvicidal Activities	Spray	Fog	Back log	Brochures Distributed	
01/19	40	351	17 (4.8 % container Index) (I-8, I-9, G-6, G-7, G-8, F-6, D-12)	27 →	G-6=5, G-7=5, I-9=6, F-6=2, G-5=1, G-11=1, G-9=1, I-10=1, G-8=1, D-12=1, G-10=1, F-8=1, F-10=1	351	692	441	4.5 % <i>17/376</i>	1083	G-6, G-7, I-9, F-6, F-7, F-5, G-11, I-11, I-10, G-8, I-8, F-11, Embassy Road, H-9, G-9, E-11.

Activities since 1 <sup>st</sup> January, 2019		
Total Samples taken	Total Aedes +ve Samples	Total cases reported w.e.f 1 <sup>st</sup> January 2019
19408	4046	403 (Urban Islamabad)

Details of sector-wise cases reported since 1 <sup>st</sup> January, 2019												
F-5=3	F-6=20	F-10=5	G-5=3	G-6=74	G-7=170	G-8=42	G-9=11	G-10=9	G-11=7	H-8=4	I-8=6	I-9=18
I-10=9	D-12=2	E-11=1	F-7=6	S.Pur=2	Rawal Town=1	F-8=4	I-11=3	G-13=1	I-14=1	B.area=1		

Sector planned for 02-9-2019	Status of Insecticides (in balance)		
G-6, G-7, I-9, F-6, G-5, G-11, G-9, I-10, G-8, D-12, G-10, F-8, F-10	Insecticide for IRS	Insecticide for Fog	Insecticide for larviciding
	1. Alphacypermethrin-166 Ltrs 2. Deltamethrin 5% WP- 100Kg	1. Malathion 50EC- 08 liters 2. Fog material 30 lit. (Gifted by Chamtech pest Management)	1. Granule Temephose -500 kg 2. Liquid Temephose-33 ltrs

  
 (DR. ABDUL SATTAR)  
 ENTOMOLOGIST

  
 (DR HASAN OROSH)  
 DG Health, DHS

CC:

1. SA to Prime Minister for Health, Islamabad.
2. DG Health M/o NHSRC, Islamabad
3. Dengue Focal Person, M/o NHSRC, Islamabad
4. PS to Mayor MCI, Islamabad
5. PS to Chief Commissioner, ICT, Islamabad.

