

# **BANGLADESH: DENGUE FEVER**

31 July 2000

## **Information Bulletin N° 1**

### **The Disaster**

#### **Overview •**

Following heavy rains and the inflow of water run-off from the river systems of India, much of Bangladesh is now covered with water. In the cities, poor standards of public sanitation have resulted in many pools of stagnant water, the ideal breeding grounds for mosquitoes.

By 27 July, three cities had reported outbreaks of dengue fever. By 30 July, press stated that 14 cities were reporting the disease. The virus may also be active in rural areas but is as yet unreported due to poor communications. Due to the widespread stagnant water, there is a fear that the situation may deteriorate into a nation-wide epidemic.

#### **Affected Population •**

Reliable data are hard to come by but media reports indicate that as of 27 July, there were outbreaks in the capital of Dhaka, the major port city of Chittagong and the District capital of Rajshahi on the north bank of the Padma (Ganges) River. The distribution was in the form of a belt from the north-east to the south-west.

Area	Geographical Area	Number Infected	Number Dead
Dhaka	Central	160	12
Chittagong	SE	15	2
Rajshahi	NW	1	0
<b>Totals</b>		<b>176</b>	<b>14</b>

As of 31 July, outbreaks had been reported in all geographical areas of the country and the figures had risen alarmingly. In four days the number of infection sites increased from 3 to 17, the number of infected from 176 to 522, and the number of fatalities from 14 to 21.

#### **The Disease and its Vectors •**

The disease is viral in nature and thus is not susceptible to being cured by drugs -- only palliative measures can be taken. There are two forms: Dengue Fever (DF) and Dengue Haemorrhagic Fever (DHF), the latter may be fatal. The disease is characterised by symptoms of fever, muscle and joint

# **BANGLADESH: DENGUE FEVER**

31 July 2000

## **Information Bulletin N° 1**

### **The Disaster**

#### **Overview •**

Following heavy rains and the inflow of water run-off from the river systems of India, much of Bangladesh is now covered with water. In the cities, poor standards of public sanitation have resulted in many pools of stagnant water, the ideal breeding grounds for mosquitoes.

By 27 July, three cities had reported outbreaks of dengue fever. By 30 July, press stated that 14 cities were reporting the disease. The virus may also be active in rural areas but is as yet unreported due to poor communications. Due to the widespread stagnant water, there is a fear that the situation may deteriorate into a nation-wide epidemic.

#### **Affected Population •**

Reliable data are hard to come by but media reports indicate that as of 27 July, there were outbreaks in the capital of Dhaka, the major port city of Chittagong and the District capital of Rajshahi on the north bank of the Padma (Ganges) River. The distribution was in the form of a belt from the north-east to the south-west.

Area	Geographical Area	Number Infected	Number Dead
Dhaka	Central	160	12
Chittagong	SE	15	2
Rajshahi	NW	1	0
<b>Totals</b>		<b>176</b>	<b>14</b>

As of 31 July, outbreaks had been reported in all geographical areas of the country and the figures had risen alarmingly. In four days the number of infection sites increased from 3 to 17, the number of infected from 176 to 522, and the number of fatalities from 14 to 21.

#### **The Disease and its Vectors •**

The disease is viral in nature and thus is not susceptible to being cured by drugs -- only palliative measures can be taken. There are two forms: Dengue Fever (DF) and Dengue Haemorrhagic Fever (DHF), the latter may be fatal. The disease is characterised by symptoms of fever, muscle and joint

ache, headache, anorexia and rash with an incubation period of commonly 7 to 10 days. In DHF, haemorrhagic phenomena are frequently seen.

The disease is not communicable person to person, the sole vector is the Aedes mosquito. The two culprits are Aedes Albopictus and Aedes Aegypti.

## ***Red Cross/Red Crescent Action***

The Bangladesh Red Crescent Society (BDRCS), recognising the potential gravity of the problem, has taken urgent action to establish a 30-bed Dengue Ward at the National Society's Holy Family Hospital. Care is being offered to the poorer segment of the population at a rate of 400 Taka (8 USD) per day, for a 10-day period of treatment. This fee includes all treatment, medicine, food and accommodation. Those unable to pay are, of course, not being charged. Planning is underway to enlarge this Dengue Ward to 150 beds should a greater emergency develop. If the necessity arises the BDRCS will operate emergency Dengue Wards under canvas in the grounds of the Holy Family Hospital. The Aedes mosquitoes will be prevented from entering the area so they cannot become infected with and subsequently transmit the virus.

The Federation is arranging the supply of 2,000 triple blood bags, 800 x 250 ml paediatric blood bags and 250 testing kits which are currently in poor supply in the country. The BDRCS is keeping its blood bank open 24 hours a day.

The Federation and the BDRCS are in active liaison with the Ministry of Health, MSF and WHO. The BDRCS is sending a circular to all Units warning of the dangers of DF and providing practical advice on how to eradicate the Aedes mosquito. The National Society also has plans to print and distribute leaflets in the poorer sections of the cities.

The Federation, the BDRCS and Health Services Director held a meeting with WHO on 31 July which confirmed that Bangladesh has only a rudimentary surveillance and reporting system, and that government figures indicated 433 infected persons and 14 dead in just Dhaka and Chittagong. It has been decided that WHO would train four doctors from the BDRCS Holy Family Hospital in DHF management according to WHO clinical protocols.

The BDRCS was advised to mobilise their volunteers to conduct door-to-door information campaigns until the end of the rainy season in the middle of September, urging the public to destroy all possible mosquito breeding sites. Accordingly, the BDRCS is printing 200,000 leaflets to be distributed across the country, and will conduct a door-to-door information and clean-up campaign for a six-week period from 2 August by utilising the Red Crescent Youth volunteers.

Though still terming the emergency an outbreak and not an epidemic, based on its past experience in other parts of the world, the World Health Organisation considers this could be only a tip of an iceberg.

## ***Needs***

There is a distinct possibility that the BDRCS will seek support through an Appeal should the outbreak reach epidemic proportions. An immediate donor response in that case would enable the BDRCS/Federation to reach the affected population in the shortest possible time.

ache, headache, anorexia and rash with an incubation period of commonly 7 to 10 days. In DHF, haemorrhagic phenomena are frequently seen.

The disease is not communicable person to person, the sole vector is the Aedes mosquito. The two culprits are Aedes Albopictus and Aedes Aegypti.

## ***Red Cross/Red Crescent Action***

The Bangladesh Red Crescent Society (BDRCS), recognising the potential gravity of the problem, has taken urgent action to establish a 30-bed Dengue Ward at the National Society's Holy Family Hospital. Care is being offered to the poorer segment of the population at a rate of 400 Taka (8 USD) per day, for a 10-day period of treatment. This fee includes all treatment, medicine, food and accommodation. Those unable to pay are, of course, not being charged. Planning is underway to enlarge this Dengue Ward to 150 beds should a greater emergency develop. If the necessity arises the BDRCS will operate emergency Dengue Wards under canvas in the grounds of the Holy Family Hospital. The Aedes mosquitoes will be prevented from entering the area so they cannot become infected with and subsequently transmit the virus.

The Federation is arranging the supply of 2,000 triple blood bags, 800 x 250 ml paediatric blood bags and 250 testing kits which are currently in poor supply in the country. The BDRCS is keeping its blood bank open 24 hours a day.

The Federation and the BDRCS are in active liaison with the Ministry of Health, MSF and WHO. The BDRCS is sending a circular to all Units warning of the dangers of DF and providing practical advice on how to eradicate the Aedes mosquito. The National Society also has plans to print and distribute leaflets in the poorer sections of the cities.

The Federation, the BDRCS and Health Services Director held a meeting with WHO on 31 July which confirmed that Bangladesh has only a rudimentary surveillance and reporting system, and that government figures indicated 433 infected persons and 14 dead in just Dhaka and Chittagong. It has been decided that WHO would train four doctors from the BDRCS Holy Family Hospital in DHF management according to WHO clinical protocols.

The BDRCS was advised to mobilise their volunteers to conduct door-to-door information campaigns until the end of the rainy season in the middle of September, urging the public to destroy all possible mosquito breeding sites. Accordingly, the BDRCS is printing 200,000 leaflets to be distributed across the country, and will conduct a door-to-door information and clean-up campaign for a six-week period from 2 August by utilising the Red Crescent Youth volunteers.

Though still terming the emergency an outbreak and not an epidemic, based on its past experience in other parts of the world, the World Health Organisation considers this could be only a tip of an iceberg.

## ***Needs***

There is a distinct possibility that the BDRCS will seek support through an Appeal should the outbreak reach epidemic proportions. An immediate donor response in that case would enable the BDRCS/Federation to reach the affected population in the shortest possible time.

Peter Rees-Gildea  
Director  
Operations Funding and Reporting Department

Hiroshi Higashiura  
Director  
Asia and Pacific Department

**This and other reports on Federation operations are available on the Federation's website: <http://www.ifrc.org>**

Peter Rees-Gildea  
Director  
Operations Funding and Reporting Department

Hiroshi Higashiura  
Director  
Asia and Pacific Department

**This and other reports on Federation operations are available on the Federation's website: <http://www.ifrc.org>**