

# ***CENTRAL AND WEST AFRICA: MENINGITIS***

**appeal no: 08/97**  
**04 April 1997**

***THIS APPEAL SEEKS CHF 5,707,000  
IN CASH, KIND AND SERVICES***

## ***Summary***

Every year, the seventeen countries in sub Saharan Africa face the risk of outbreaks of bacterial meningitis, often in the form of severe epidemics. This "meningitis belt", which stretches from Ethiopia to Senegal, has a total population of some 300 million. In 1996, a record 150,000 cases and 16,000 deaths (mostly children) were reported. However, if under-reporting is taken into account, the total caseload was very likely about 250,000, with 25,000 to 30,000 deaths.

Mortality is about 10% of all cases. The survivors, particularly children, often suffer mental and physical impairments. Outbreaks are seasonal, generally occurring between January and May.

This appeal represents the Federation's participation in and contribution to an international effort, in collaboration with the World Health Organisation (WHO), to contain the disease in sub Saharan Africa and reduce its impact on sufferers' health.

### **WHO initiative •**

As part of its inter-agency initiative begun in mid-1996 to control meningitis epidemics in Africa, WHO established an International Co-ordinating Group (ICG) in January 1997 composed of UN agencies, International organisations including the International Federation, NGOs and other technical partners. On 7 February WHO, the International Federation, Médecins sans Frontières (MSF) and UNICEF launched an appeal to fund meningitis control in Africa from 1997 to 2000. The combined appeal sought USD 6.3 million (CHF 9,072,000) to purchase 14 million doses of vaccine in 1997 and a yet to be determined amount to finance epidemic preparedness and response from 1998 to 2000.

This Federation appeal has two components. First, it seeks CHF 3,127,000, to cover the purchase of four million doses of vaccine and related materials for use in 1997. This represents the Federation's share of the 14 million doses sought by the four-agency appeal.

The second part of the Federation appeal -- for CHF 2,580,000 -- is for a response and preparedness training programme for National Societies of the region that does not form part of the combined appeal. The programme will provide for the training of Red Cross volunteers as

vaccinators and the training of health volunteers in identifying the disease and supporting the monitoring and control efforts of the health authorities. With its community-based, country-wide structures, the Red Cross volunteer network is well placed to support and supplement government health services.

## ***The Intended Operation***

### **Vaccine supply •**

The Federation intends to make four million doses of vaccine available for countries in the "meningitis belt" of Africa. When outbreaks are diagnosed, the most effective strategy for containing the epidemic is the immediate vaccination of the contacts of the first cases. It is therefore crucial to have the necessary vaccines on hand.

However, because of the size of the epidemics in 1996, some governments purchased almost all of the world's available vaccine stocks. As a result, there are currently no stocks available on the market.

One of the International Co-ordinating Group's first moves after its creation was to meet with the principal manufacturers of the meningitis vaccine. These suppliers are now committed to reserving the 14 million doses of vaccine that will be on the market in 1997 for the inter-agency control programme. This quantity represents less than half of the 30 million doses that WHO estimates will be needed in 1997, making it imperative to allocate available supplies to the areas of greatest need. An executive group of the ICG has been set up (of which the Federation is a member) to decide *on a day to day basis* the allocation of emergency vaccine stocks to affected countries. Criteria for allocation include the severity of the outbreak and the need for support, as well as vulnerability. So far, approximately, 300,000 doses of vaccine have been allocated.

It is hoped that systematic mass vaccination in the 17 target countries by government health services, supported by the inter-agency consortium, will gradually eliminate the risk of meningitis epidemics in the sub-region.

### **Training •**

In 1997-1998, Federation-sponsored training can focus only on some 10 countries with the highest epidemic risk. It is tentatively planned that it will begin with a three-day workshop for 20 National Society participants, to be held at the West Africa Regional Delegation Office in Abidjan. A five-day session to train trainers would then be held in each of the countries represented. These trainers will carry out assessments of their own country's needs in the area of volunteer training. The 1998 training programme will cover those meningitis belt Societies not included in 1997.

A more detailed plan of action is being worked out by the Secretariat, the West Africa Regional Delegation and the National Societies concerned. The ultimate aim is to reinforce an IEC programme (Information, Education and Communication) on epidemic control, and in particular meningitis. The Federation has already developed some educational materials in several local languages. National Societies of the region are distributing and using them for their CBFA trainers and volunteers and for the vaccination teams.

## *The Disaster*

Meningococcal meningitis is a contagious disease with a case fatality rate of 5% to 10%. The onset of symptoms is easily recognisable.

The year 1996 saw a record number of meningitis cases in sub Saharan Africa. It is estimated that 30% of the sufferers will have long term health sequelae.

Previous experience in countries in the meningitis belt indicates that incidence rates remain high for one to two years following an outbreak, with successive seasonal outbreaks separated by remissions.

The 1997 meningitis season in Africa has already begun, with Benin, Burkina Faso, Gambia, Ghana, Mali, Niger and Togo reporting a total of 24,798 cases (2,933 deaths). The epidemic in Burkina Faso accounts for 42% of this total (10,429 cases, 1'318 deaths). Although Ghana has fewer cases, the country is the worst hit: the number of cases there more than doubled in ten days, i.e. 13 March (3,757 cases with 411 deaths) to 23 March (8,671 cases with 902 deaths).

## *The Response so far*

### **Federation/National Societies •**

In 1996, the National Societies of Nigeria and Burkina Faso, with support raised by two Federation appeals, vaccinated almost three million people in areas of their countries affected by epidemics.

### **Government •**

The size of the 1996 outbreaks overwhelmed the response capacity of the region, producing poor prioritisation, inadequate reporting, vaccine needs assessments and procurement, and some duplication of efforts.

Because of the problems encountered, there has been a shift in emphasis from epidemic response to epidemic preparedness -- and its corollary, improved co-ordination. The governments of 16 African countries, meeting in Ouagadougou in October 1996, committed themselves to the support of meningitis control. They have since developed national plans of action which include estimations of vaccine needs based on population at risk, assessments of stocks available in country and improved surveillance and reporting systems.

## *The Needs to be met*

### **Assessment of Needs •**

In order to control meningitis outbreaks in the risk countries of sub-Saharan Africa, sufficient amounts of vaccines must be available. WHO and the ICG have estimated that a minimum of 14 million doses will be required to control large annual outbreaks.

To ensure a rapid response, the existing system for recognition of cases needs major improvement. Since incipient symptoms of meningitis are very clear, it is planned to

involve much larger numbers of village health volunteers in surveillance and reporting. This will require training of volunteers in disease recognition in all affected countries.

In all Red Cross Societies of the region, approximately 500 volunteers per Society will require training in vaccination techniques.

Each country will develop a social mobilisation campaign, providing information to the population through the mass media and written materials. These messages need to be defined, translated into local languages and distributed. The Red Cross can play a major role in developing and promoting these campaigns.

#### **Immediate Needs •**

The 1997 meningitis season has already begun in Africa. By early February, major outbreaks had been recorded in Togo, Burkina Faso, Mali and Ghana. Cash for the purchase of the necessary vaccine supplies is therefore urgently needed.

Training needs to start as soon as possible. Budget requirements cover the training of vaccinators and the costs of three delegates to supervise co-ordination for approximately three months in countries with major outbreaks.

Because of communication difficulties within the sub-region and the large geographical area of operations, 15 four-wheel-drive vehicles will be required over the three-year operational span.

## ***Red Cross Objectives***

1. To contribute to reducing meningococcal meningitis permanently to endemic levels in the meningitis belt of sub-Saharan Africa by 1999.
2. To increase the capacity of National Societies of the sub-region in the control of meningitis, which is a priority disease.
3. To help improve joint international action for disease surveillance and control in sub-Saharan Africa.

## ***National Society/Federation Plan of Action***

Due to the lack of adequate health and social facilities in some rural areas of the affected countries the Federation in collaboration with the Red Cross Societies of the sub-region is planning to assist the governments, district services and local communities in conducting containment and preventive activities for the period 1997 - 1999.

#### **Containment •**

The Federation will promote the organisation of vaccination teams composed of Red Cross doctors, nurses and volunteers as well as public health nurses, who will work together with local health structures in the affected countries.

#### **Prevention •**

Information and dissemination activities to explain prevention measures will be carried out, using brochures and pamphlets produced by the Red Cross.

To complement the activities of governments, small amounts of basic drugs, such as chlorempenicol and antibiotics, will be provided for people who have already contracted meningitis. These supplies will be put at the disposal of rural health structures.

## ***Capacity of National Societies***

The Red Cross Societies in the operational area have large, country-wide networks of branches and volunteers, making the large-scale deployment of expatriate delegates unnecessary. Advisers in different functional areas are available at both national and branch level. The majority of field workers are volunteers, and some are trainers in first aid and disaster relief.

The National Societies are already utilising staff and volunteers with a high degree of technical proficiency. In total, an estimated 3,500 Red Cross volunteers, including nurses and doctors, will be working in this operation, in close collaboration with Federation health delegates, over the next three years.

### **Co-ordination •**

The Regional Health Delegates attached to the Federation's Regional Delegations in Brazzaville and Abidjan will collaborate closely with the regional meningitis surveillance team of WHO in Abidjan and WHO's unit for disease control based in its African Regional Office in Brazzaville. The rapid exchange of information on individual cases and larger outbreaks will help the Ministries of Health and the international organisations to respond.

The inter-country approach to training will ensure that the same case definition will be used by village volunteers, thus ensuring uniformity of reporting.

The ICG will meet twice a year in June and December. The Executive Group of the ICG will maintain close contact throughout the meningitis season. The secretariat is being provided by WHO.

## ***Budget summary***

See Annex 1 for details.

## ***Conclusion***

Meningitis, and the rapidity with which it can spread throughout the region, pose a major threat to the lives of millions of people in sub Saharan Africa. Working with the countries' existing health structures and other humanitarian organisations, the Federation and the operating National Societies will contribute to its containment. The Federation urges donors to support this timely and important appeal.

Margareta Wahlström  
Under-Secretary General,  
Disaster Response & Operations Coordination

George Weber  
Secretary General