

# EMERGENCY APPEAL



International Federation of Red Cross and Red Crescent Societies  
Fédération internationale des Sociétés de la Croix-Rouge et du Croissant-Rouge  
Federación Internacional de Sociedades de la Cruz Roja y de la Media Luna Roja  
الاتحاد الدولي لجمعيات الصليب الأحمر والهلال الأحمر

## ***ETHIOPIA: MENINGITIS EPIDEMIC***

**Appeal no:06/2002  
21 February 2002**

***THIS REQUEST FOR ASSISTANCE SEEKS  
CHF 1,460,000 (USD 857,000/EUR 988,000)  
IN CASH, KIND AND SERVICES  
TO ASSIST 1,800,000 BENEFICIARIES  
FOR THREE MONTHS***

***Disaster Relief Emergency Fund (DREF) allocated: CHF 200,000***

### ***The Situation***

Ethiopia is again facing a serious epidemic of meningococcal meningitis. The Southern Nations and Nationalities Peoples region (SNNPR) - population 12.5 million - and Oromiya region - population: 22.3 million - are the most affected. These are regions with high population densities and low vaccination coverage, and there is concern that the outbreak will continue to spread to other regions. A recent outbreak from October 2000 to July 2001 killed 330 people but many areas of the country were unaffected. The government has set-up a task force to coordinate response activities and requested support from partners to conduct rapid mass vaccination in districts affected by the epidemic. The Ethiopian Red Cross Society (ERCS) will assist with procurement of vaccines and supplies, public awareness and mass vaccination campaigns in affected districts in North Omo zone of SNNPR, population 3.1 million.

Ethiopia lies in the African Meningitis Belt, and outbreaks of meningococcal meningitis are reported approximately every ten years, usually 2-3 years after outbreaks in Sudan. Major outbreaks were recorded in Ethiopia in 1981 (50,000 cases and 990 deaths) and in 1989 (45,806 cases and 1,686 deaths). After the last outbreak in Sudan in 1999, a large outbreak occurred in Addis Abeba between June and August 2000, with 850 cases and 33 deaths, and was controlled through a successful mass campaign in which the Red Cross played an important role. From October 2000 to July 2001, the outbreak spread throughout the country along major roadways, primarily to the Amhara region, and to a lesser extent to SNNPR and to Oromiya region. It led to 6,964 cases and 330 deaths.

In February 2001 the Ministry of Health (MoH) established a coordinating committee on meningitis control with major partners - including the International Federation and Ethiopian Red Cross Society,

WHO, MSF and UNICEF - and requested support for controlling the spread of the epidemic through surveillance and rapid mass vaccination of affected districts. Various organizations contributed vaccines, drugs, personnel and financial assistance to the MoH. By the end of the outbreak a total of 6,2 millions doses of vaccine had been imported. Approximately 770,000 doses of vaccine remained when the outbreak subsided in July 2001. The stock became a precious preparedness store for an early response to the resurgence of the number of cases from September 2001.

The current outbreak started in September 2001 and has continued to spread despite early vaccination efforts in selected districts. As of 3 February 2002, a total of 1,332 cases and 85 deaths have been reported in the SNNPR and Oromiya. Countrywide, the 2-30 years age group - which is the most at risk - totals 44.5 million. Only 5.8 million of this group have been vaccinated in the last two years. There is concern that the outbreak will reach the scale of the 1981 and 1989 outbreaks, unless transmission is curtailed through intensified surveillance and rapid mass vaccination.

The MoH has conducted an assessment in the most affected areas and has developed a risk classification scheme, based on number of cases, population density, estimated prior vaccination coverage, proximity with other epidemic districts, and other risk factors. The following table summarizes the areas in Category 1 proposed for immediate intervention.

**Table 1. Population figures, Cases and Deaths in high-risk zones (Category 1), September 2001 to January 2002.**

Zone	Population	Target population	2001		2002	
			Cases	Deaths	Cases	Deaths
<b>Sidamo</b>	2,466,845	1,726,792	295	12	721	40
<b>Gedeo</b>	684,728	479,310	13	0	0	0
<b>South Omo</b>	395,380	276,766	1	0	66	1
<b>North Omo</b>	3,142,134	2,199,494	30	6	110	7
<b>Hadiya</b>	1,265,922	886,145	223	8	18	4
<b>Total</b>	<b>7,955,009</b>	<b>5,568,507</b>	<b>562</b>	<b>26</b>	<b>915</b>	<b>52</b>

Source MoH

## *The Response so far*

### **Government Action**

- The Ministry of Health has reactivated the ad-hoc committee for meningitis outbreak response and is convening weekly coordination meetings.
- An assessment team was sent to the most affected regions, and an alert - with recommendations and control guidelines - has been issued to all regional health bureaux.

- Mass vaccination using strategic stocks was conducted in the most affected areas - Sidamo zone, Bahiridar zuria and others - after the epidemic threshold was reached. (**NB:** The epidemic threshold is reached when the attack rate of meningitis reaches 10 cases per 100,000 people each week.)
- Regions and zones have been categorized as (1) areas at high risk requiring immediate action and mass vaccination; (2) areas in need of intensified surveillance and close follow-up; and (3) areas under routine monitoring.

On 13 February 2002, the MoH launched an appeal seeking 5.9 million doses of vaccine with accessories (auto-disposable syringes and safe-disposal boxes), 6,000 ampoules of chloramphenicol in oil suspension, latex agglutination test kits (20 kits with 25 tests each), and financial assistance to cover the running costs and training of health professionals. The total requested in MoH appeal is USD 2,554,260, of which 74% goes for vaccines and accessories, 0.5% for drugs and reagents, 10.5 % for running cost and training and 15% contingency.

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

The ERCS, in collaboration with the Federation, played a significant role in the control of the 2000-2001 epidemic. ERCS participated in the work of the ad-hoc committee on meningitis in the MoH, and in the coordination of partner efforts. An appeal in December 2000 supported the procurement of 1,870,000 doses of vaccine bundled with accessories, of which 1,250,000 doses were used in mass vaccination operations in collaboration with local health services or other organizations. 8,000 vials of chloramphenicol in oil suspension were procured for emergency treatment of meningitis cases. Vaccine remaining at the end of vaccination operations became a strategic stock that was an essential component in the early stage of the current outbreak response.

The ERCS is coordinating its response with other actors and has identified North Omo zone in SNNPR as the area for its proposed intervention. North Omo zone borders other areas - Sidamo zone and South Omo zone - that have been classified as high-risk requiring immediate intervention. The total population of North Omo zone is 3.1 million, with a target population for vaccination (aged 2-30 years) of 2.2 million. ERCS will provide vaccine and supplies to support rapid mass vaccination in districts reaching the epidemic threshold, and will support the costs of volunteers active in social mobilization and vaccination operations. Three districts (woredas) are identified as high-risk (category 1) for immediate intervention: Arba Minch Zuriya, Ubadebretsehay, and Damot Woyde. The total population of the three woredas is 370,453. To achieve a coverage of 80% of the target population - aged 2-30 years - 207,454 people will have to be vaccinated. Other districts may become eligible for rapid mass vaccination if/when case counts reach epidemic thresholds.

### **Other Action**

- An expert team from WHO's headquarters made an assessment visit to Ethiopia in January, contributing to the definition of the control strategy. WHO has pledged to procure latex agglutination test kits and vaccine (amount not yet determined). WHO has informed the International Coordinating Group (ICG) of the appeal by the Government of Ethiopia.
- The Kuwait Embassy in Ethiopia has pledged to donate 150,000 doses of vaccine through the ERCS.
- MSF groups (Belgium, Holland, Switzerland and France) are engaged in active surveillance but there is no commitment on provision of vaccine so far.
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- USAID has committed funds for control of communicable diseases, some of which will be allocated by MoH for the control of this epidemic.

**Table 2. Cases and deaths by week in the most affected woredas of North Omo zone, 2001-2002**

Woreda	Pop-n		Week number (2001-2002)													
			44	45	46	47	48	49	50	51	52	1	2	3	4	
Damot Woyde	39,518	Cases	0	0	0	0	0	0	0	0	0	6	1	12	0	0
		Deaths	0	0	0	0	0	0	0	0	0	1	0	2	0	0
		Attack rate	0	0	0	0	0	0	0	0	0	15	2.5	30	0	0
Arbaminch Zuriya	140,890	Cases	0	0	0	0	0	0	1	15	5	0	0	0	0	0
		Deaths	0	0	0	0	0	0	1	0	2	0	0	0	0	0
		Attack rate	0	0	0	0	0	0	0.7	11	3.5	0	0	0	0	0
Ubadebretshay	190,045	Cases	0	0	0	0	0	0	0	0	3	26	42	8	0	
		Deaths	0	0	0	0	0	0	0	0	3	1	0	1	0	
		Attack rate	0	0	0	0	0	0	0	0	1.6	14	22	4.2	0	
<b>Total</b>	<b>370,453</b>	Cases	0	0	0	0	0	0	1	15	14	27	54	8	0	
		Deaths	0	0	0	0	0	0	1	0	6	1	2	1	0	
		Attack rate	0	0	0	0	0	0	0.3	4	3.8	7.3	15	2.2	0	

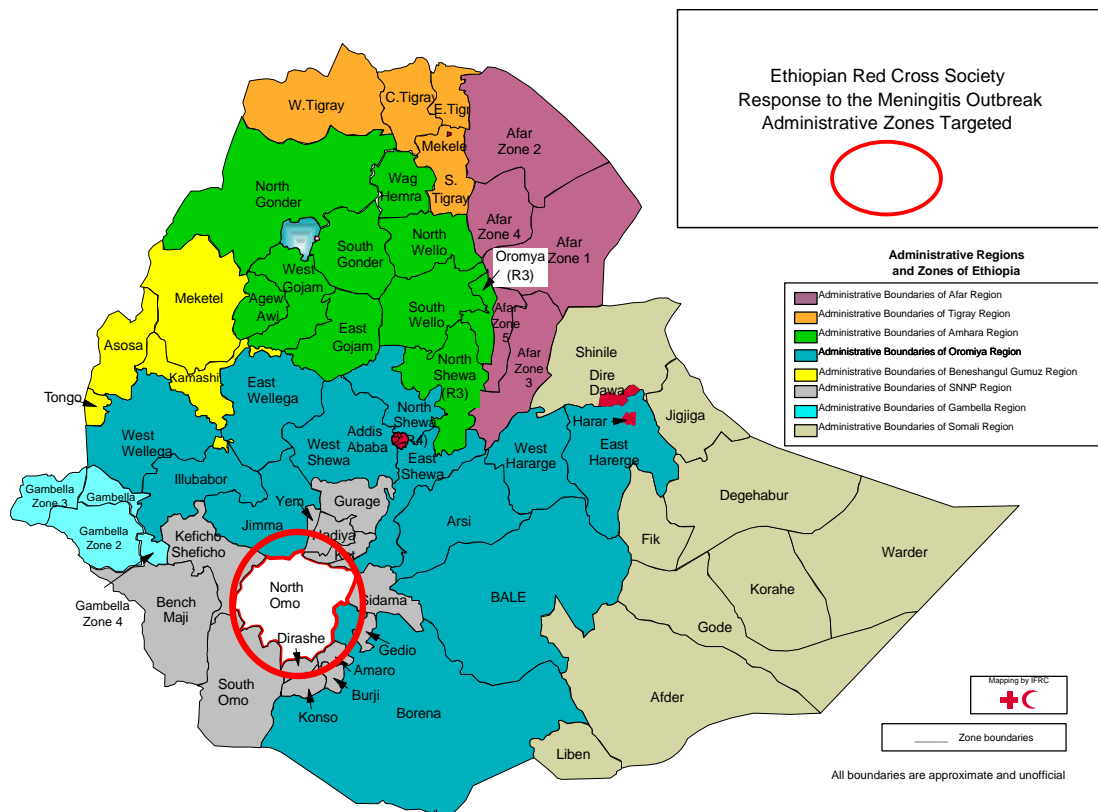
Source MOH

## *National Society/Federation plan of action*

### **Immediate needs**

Needs have been assessed by visits of teams of MoH officials to the affected areas, compilation of epidemiological surveillance reports, and categorization of areas by level of risk in application of recognized criteria by the coordinating committee with the participation of ERCS staff. The immediate needs are for drugs (Chloramphenicol oily suspension) for treatment of meningitis cases; vaccines and supplies for rapid mass vaccination in epidemic districts to prevent further spread of the outbreak; and costs of Red Cross staff and volunteers to engage in social mobilization and vaccination operations. The Federation has made CHF 200,000 available from its Disaster Relief Emergency Fund (DREF). Of this, CHF 150,000 will be used to procure 200,000 doses of vaccine, bundled with 20,000 syringes and 1,000 doses of Chloramphenicol oily suspension.

### Administrative map of Ethiopia showing the intervention area (North Omo Zone)



#### Coordinated Strategy

- The major responsibility for conducting the intervention will be with the MoH and the health department in North Omo. The Federation will provide the resources generated by this proposal.
- The National Society and the Red Cross branch in North Omo will continue being a member of the technical and coordination committees.
- Mass vaccination will be decided by health authorities in districts (woredas) reaching epidemic threshold criteria. Before any vaccination campaign a detailed action plan will be prepared with the participation of the woreda health office, the woreda administration, the Red Cross branch, the coordinator from the National Society, and representatives of health institutions. The action plan will identify the areas to be covered, the target population, responsibilities of the various stakeholders, resources to be used and the timeframe.
- A system of regular monitoring will be established to ensure a regular follow up and feedback.

#### Red Cross Objectives

- To procure 1.8 million doses of meningitis vaccine and related supplies (18,000 boxes of auto-disposable syringes, safe-disposal boxes) for mass vaccination in North Omo Zone, SNNPR, and 2,000 vials of oily Choramphenicol for treatment of meningitis cases.
- To assist the Regional Health Bureau and Zonal Health Departments in the mass vaccination activities in North Omo zone of the SNNP region, through the deployment of Red Cross volunteers for the purpose of mobilizing the communities to increase public awareness and vaccination of population groups at risk.

**Expected outputs.**

- 1.8 million people will be protected from the epidemic by providing a protective vaccination to at least 80% of the target population.
- An anticipated 2,000 people who otherwise would have contracted the illness would have been protected from loss of life and disability via an easy to administer drug.
- The capacity of the branch to act on emergencies will be improved through the training and active participation in this intervention.
- The networking of the National Society and the Red Cross branch with other stakeholders and the community will be improved.
- The National Society will maintain its image and credibility by being an active partner to the community in the time of emergency.

**Objective 1 Activities:**

- Procurement and transportation of 1.8 million doses of vaccine with accessories, and 2,000 vials of chloramphenicol in oil suspension will be undertaken by the Federation.
- The ERCS will take the responsibility to clear the vaccine from the airport and deliver it to the MoH.
- Stocks will be stored initially at the MoH cold store in Addis Ababa, which has adequate capacity.
- Vaccine will be transported from the cold store in Addis to the site of vaccination by MoH services under cold chain conditions.

**Objective 2 Activities:**

- The ERCS branch in North Omo and its sub-branches in Chencha, Gidole and Wolayta have been informed about the intervention and plan to mobilize their youth volunteers.
- One staff from the ERCS headquarters with adequate experience will be assigned to coordinate the intervention.
- The Federation will assign a delegate as project liaison officer to assist the National Society.
- The volunteers will receive one-day orientation and training on the control of meningitis and appropriate social mobilization messages.
- The volunteers will conduct house to house sensitization reaching 9,000 households.
- 15,000 copies of the meningitis leaflet will be distributed to the target population.
- A detailed action plan will be prepared in collaboration with the Zonal Health department, woreda health offices, and the woreda administration.
- 30 teams, composed of two volunteers and one health professional, will be organized and trained to conduct the vaccination and public mobilization.
- Red Cross teams will participate in active surveillance in all woredas under the responsibility of health authorities.

- The intervention will be monitored both by the coordinator from the headquarters and the ERCS zonal branch.
- The lessons learnt during the intervention will be documented for future use
- 30 public health education sessions will be carried out in schools, markets and bus stations.

### **Monitoring and evaluation**

- The National Society will assign a coordinator from headquarters who will be responsible to monitor the implementation of the programme. The branch secretary will also be responsible to conduct the monitoring at the field level.
- A Federation delegate will also conduct monitoring and assist in reporting on the project.
- The coordination at the national level will be maintained through the participation of the NS in the ad-hoc committee on meningitis at the MOH.
- Volunteer coaches will be assigned to monitor and report on the campaign.

### **Critical assumptions**

- The provision of vaccine and financial support in time.
- The other partners - especially the Zonal Health Department and the local authorities - participate actively.

### ***Capacity of the National Society***

The ERCS has a long tradition of responding to emergencies but developed its capacity on meningitis control in the intervention last year. The society has the capacity and systems in place to provide effective and efficient disaster response services. The Headquarters programming department will coordinate the intervention. Field coordinators will monitor the progress and assist branches in the zone.

The Red Cross branch in North Omo is situated in Arbaminch. It is managed by an active board and has a full time branch secretary and youth coordinator. The branch has got three sub-branches in Wolayta, Chencha, and Gidole. All sub-branches are managed by sub-branch secretaries and are in the most densely populated areas. The branch has two vehicles - one of which is currently broken - and an ambulance. The broken vehicle will be repaired and used with the other two to facilitate the operation.

### ***Budget summary***

See Annex 1 for details

For a full description of the National Society profile, see [www.ifrc.org](http://www.ifrc.org)

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*For support to or for further information concerning Federation operations in this or other countries, please access the Federation website at <http://www.ifrc.org>*

*For longer-term programmes, please refer to the Federation's Annual Appeal.*

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ANNEX 1

APPEAL No. 06/2002

**BUDGET SUMMARY****Ethiopia: meningitis**

<u>TYPE</u>	<u>VALUE</u>
<b><u>RELIEF NEEDS</u></b>	<b><u>IN CHF</u></b>
<u>Vaccine: 1,800,000 doses</u>	<u>670,000</u>
<u>Syringes: 18,000 boxes (100)</u>	<u>267,000</u>
<u>Chloramphenicol: 2,000 vials</u>	<u>35,000</u>
<u>Safety boxes: 18,000</u>	<u>33,000</u>
<b><u>TOTAL RELIEF NEEDS</u></b>	<b><u>1,005,000</u></b>
<b><u>PROGRAMME SUPPORT</u></b>	
<u>Programme management</u>	<u>98,000</u>
<u>Technical support</u>	<u>29,000</u>
<u>Professional services</u>	<u>33,000</u>
<b><u>TRANSPORT STORAGE &amp; VEHICLE COSTS</u></b>	<b><u>105,000</u></b>
<b><u>PERSONNEL</u></b>	
<u>Expatriate staff (1 delegate / 3 months)</u>	<u>30,000</u>
<u>National staff</u>	<u>68,000</u>
<u>Training</u>	<u>9,000</u>
<b><u>ADMINISTRATIVE &amp; GENERAL SERVICES</u></b>	
<u>Travel &amp; related expenses</u>	<u>20,000</u>
<u>Information expenses</u>	<u>5,000</u>
<u>Administrative &amp; general expenses</u>	<u>58,000</u>
<b><u>TOTAL OPERATIONAL NEEDS</u></b>	<b><u>455,000</u></b>
<b><u>TOTAL APPEAL CASH, KIND, SERVICES</u></b>	<b><u>1,460,000</u></b>
<b><u>LESS AVAILABLE RESOURCES (-)</u></b>	<b><u>0</u></b>
<b><u>NET REQUEST</u></b>	<b><u>1,460,000</u></b>