

FINAL REPORT



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

3 December,
2001

This Final Report is intended for reporting on emergency appeals

Appeal No. 12/01

Launched on: March 2001 for 3 months for CHF 1,006,787

DREF Allocated: CHF 200,000 (entirely reimbursed)

Beneficiaries: 1.5 million

Period covered: March - October 2001; last Operations Update (no. 2) issued on 11 June 2001)

“At a glance”

Appeal coverage: 91%

Related Appeals: 01.13/2001 - 2001 Ethiopia annual

Summary/Update: This programme, launched to assist the Ethiopian Red Cross Society (ERCS) to respond to a meningitis outbreak, has achieved the intended objectives. A final payment from ECHO remains pending but is expected shortly, and this will cover the small deficit currently reflected in the attached final financial report.

Operational Developments:

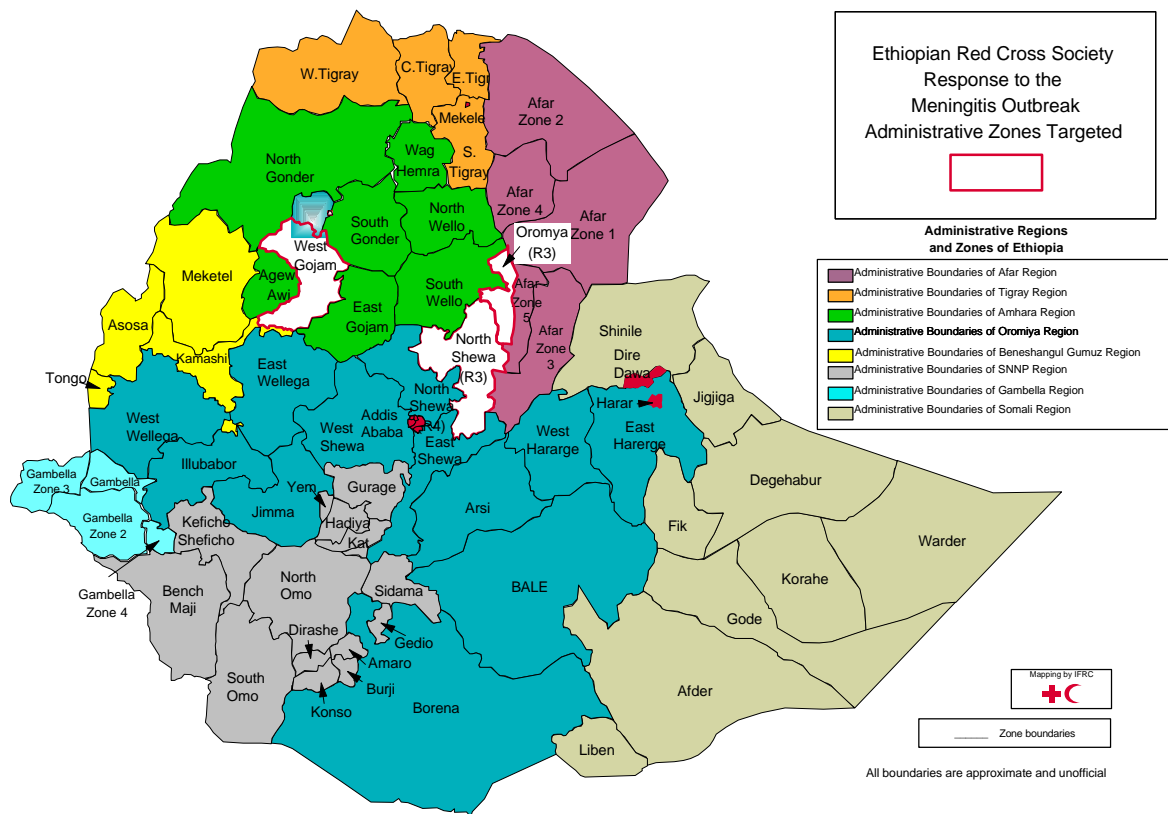
Ethiopia lies in the African Meningitis Belt which extends from the Red Sea in the east to the Atlantic ocean in the west. It has suffered major epidemics of meningococcal meningitis, a bacteria disease of the central nervous system, in 1981 when there were 50,000 cases and nearly a thousand deaths and in 1989 when there 46,000 cases and 1,700 deaths. Between June and August in 2000, there was an outbreak in Addis Ababa with over 850 cases and 33 deaths. Major epidemics usually occur every 8 to 12 years.

This epidemic started in October 2000 in Quarit Woreda in West Gojam in Amhara Region and over a period of several months spread throughout the country. It reached its peak in week 22 of the epidemic (5-11 March 2001) when 724 cases were reported although a decrease in the number of cases week on week was reversed in week 29 (23-29 April 2001) when a lower peak was reached. By end of June 2001, which marked the end of the epidemic, 6,964 cases had been reported with 330 deaths. While the majority of cases were in Amhara Region with 60 %, SNNP Region had 15% and Oromia Region had 10% of the cases (see map).

Red Cross and Red Crescent action w

In late January, the Federation/ERCS were invited along with UNICEF and MSF associations by World Health Organization (WHO) / Ministry of Health (MoH) to attend a crisis co-ordination group meeting to discuss a response to the meningitis epidemic. Federation or ERCS representatives attended the weekly meetings throughout the operation. At the end of February, the Federal Ministry of Health asked partners to assist them in the operation against the epidemic. The Federation issued an appeal on March 7, 2001 for 1.5 million vaccines and funding to support the ERCS in a meningitis vaccination campaign in the three most affected zones, West Gojam, North Shoa and Oromia, in Amhara Region (see map). These zones were selected and agreed with MoH and other partners on the basis of the severity of the outbreak there, the fact that other agencies were not operating in these zones and the capacity of the ERCS branches to carry out the intervention.

Map of Ethiopia showing areas of ERCS/Federation operations



Health w

Objective 1 To procure 1.5 million doses of vaccine and 15,000 boxes of syringes for use in the North Shoa, West Gojam and Oromia zones in Amhara region as well as 5 packs of latex tests and 8,000 vials of oily chloramphenicol for use nationally.

The operation was kick started with 200,000 CHF from the Federation's Disaster Relief Emergency Fund (DREF) which purchased an initial 200,000 vaccines in mid March allowing the operation to start in North Shoa. All vaccines were procured through the International Coordination Group (ICG), based in Geneva consisting of representatives of WHO, UNICEF, Federation and MSF, once an action plan was agreed. An additional 800,000 vaccines were procured and transported at the beginning of April. A further 370,000 vaccines were brought in during the month of June. All vaccines came with auto-destruct syringes. In addition, 8,000 vials of chloramphenicol were procured. Once the vaccines arrived at the airport in Addis, they were cleared through customs within a matter of two hours, so maintaining the cold chain before being transported to the Ministry of Health central cold storage in the capital. An additional 500,000 vaccines were procured from the extra funding made available from partners which were donated to the Ministry of Health to go towards a strategic stock as preparedness in the event of a further outbreak.

Objective 2 To assist the Ministry of Health in the vaccination campaign in North Shoa, West Gojam and Oromia zones through the deployment of Red Cross volunteers for the purpose of mobilizing communities so that at risk groups are vaccinated and awareness levels are raised

The main strategies used by the ERCS/Federation during the operation were:

- Surveillance and collection/verification of case data.
- Training along with logistical and other support for Ministry of Health (MoH) staff.
- Pre-vaccination campaign planning exercises.
- Mobilization of communities through the deployment of ERCS volunteers.
- Inclusion of volunteers in the MoH teams for the mass vaccination of woredas (districts).
- Post vaccination campaign surveillance.

The basis for an adequate response to the epidemic was accurate and timely information. While systems were, in theory, in place through the Federal, Regional and zonal Ministry of Health, information on the number of new cases was sometimes contradictory and inaccurate and it proved to be essential to verify the number of cases so as to have an accurate calculation of the attack rate. This would enable a response to be mounted when cases reached the epidemic threshold of 10 for every 100,000 people. Once clear and accurate data had been collected and there was evidence of an epidemic, vaccines were sent to the field with the agreement of the Federal Ministry of Health and WHO. ERCS/Federation assisted the MoH with the logistics of this, again ensuring the maintenance of the cold chain.

Action plans and budgets for the campaigns were developed with the zonal and district Ministry of Health with the ERCS branches in Oromia, North Shoa and West Gojam playing a proactive and competent role. Action plans were focused around targeting populations most at risk, 70% of the total population, being an approximate estimation of those between 2 and 30 years old. Mass vaccination of this targeted population was the strategy that was followed. Earlier selective vaccination campaigns carried out by the Ministry of Health because of lack of vaccines had not been successful in eradicating the disease. Doubts about the accuracy of population figures and their age distribution were commonplace. Plans also included the number of teams to be deployed, their operation sites and their target population.

Briefing and training of health staff before an operation was usually carried out with the ERCS field co-ordinator supported by the Federation Health Delegate. Training of volunteers on their roles and responsibilities was carried out in the same fashion. There was usually, at least, one volunteer in a team of five with four health workers. Volunteers were also involved in social mobilization and encouraging people to travel to the vaccination sites. As part of the operation, educational materials were produced and circulated.

Operations took from five up to twelve days depending on the number and efficiency of teams, the success of the mobilization of the community and the nature of the terrain and environment in which the operation was conducted. Coverage rates varied from 54.8% up to 91.03% (see table below). Within each woreda, rates varied considerably with rates of over 100% in towns explained by the movement of people into urban centres for markets or social occasions to rates below 60% in some more remote areas. It was the policy of the ERCS/Federation to review coverage rates at the end of the campaign and encourage a return for further vaccination in those kebeles that had not achieved a satisfactory coverage. In any case, close surveillance of all areas that had undergone vaccination was an essential part of the operation. Vaccines were left behind in all areas so that follow up action could be carried out.

Covering three zones stretched the capacity of the ERCS and Federation on several occasions and more personnel would have improved the support that was provided to the Ministry of Health. In all, 875,000 vaccines were sent to the field for the ERCS/Federation operations, 15,000 were given to MSF France for their operations, 370,000 were given to MSF Holland and MoH for their operations in North Gonder and North Shoa in Oromia Region, respectively and a balance of 610,000 vaccines are still in the cold storage in Addis Ababa as part of a strategic stock in preparedness of a new outbreak after the rainy season. Below is a table outlining the numbers vaccinated in each woreda, the coverage rates and the dates of the vaccination campaigns. A total of 744,235 people were vaccinated. There was a wastage rate of vaccines of 7%, well within the WHO norms.

Table showing numbers vaccinated in West Gojam, Oromia and North Shoa

Zone	Woreda	Vaccination date	Number of vaccinations	Coverage rate
West Gojam	Jabi	26/4 to 3/5	40,752	72.6%
	Quarit	1/5 to 6/5	35,589	67.4%
	Bure	5/5 to 13/5	104,604	74.9%
	Degadamot	12/5 to 22/5	78,116	66.4%
	Yilima Densa	30/5 to 8/6	89,243	86.9%
Oromia	Dawachefa	11/4 to 22/4	64,861	74.3%
	Artuma Jillie	11/4 to 22/4	55,672	72.3%
	Bati	29/4 to 7/5	57,309	77.4%
North Shoa	Angolele Asagirt	21/3 to 5/4	38,236	54.8%
	Kewet	21/3 to 8/4	41,118	65.6%
	Afrata Gidem	12/5 to 19/5	62,783	79.9%
	Merhabete	7/6 to 17/6	75,952	91.03%
Total			744,235	

The main lessons learned from the operation were as follows:

- ✓ The epidemic could have been declared earlier allowing for an earlier response from agencies including the ERCS.
- ✓ A strategic stock of vaccines in the country would have allowed for a quicker response to the epidemic.
- ✓ Improvements in the collection and reporting of timely and accurate data would have improved the effectiveness of the response.
- ✓ The first two interventions by the ERCS/Federation produced low coverage rates and lessons were learnt and applied in improving the level of planning, assigning clear responsibilities and holding monitoring meetings at the end of each day.
- ✓ Improving the surveillance after the vaccination campaign was an important part of the operation so that mop up vaccinations could be used.

- ✓ Visibility of ERCS volunteers was low in some of the zones. To respond, 5,000 Red Cross aprons are being produced for branches.
- ✓ Epidemic preparedness and co-ordination was weak at all levels and ERCS/Federation are involved with other agencies. WHO and MoH in devising a preparedness plan.

National Society Capacity Building w

The ERCS gained valuable experience both at Headquarters and branch level in combating the epidemic. This built capacity in the areas of co-ordination and organization. Branches proved very capable of working closely with the regional and zonal health authorities and providing significant input into planning and running the operations. The mobilization of volunteers was key to the success of the intervention. Lessons were learned quickly and the ERCS will be better prepared in the event of another epidemic.

Coordination

There was good co-ordination at central level with the local co-ordinating group meeting once a week. All agencies including the ERCS and the Federation participated in this. Close co-operation was forged with WHO, MoH and MSF associations. This was also true in the field where technical expertise, logistics and vaccines were shared.

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All International Federation Operations seek to adhere to the Code of Conduct and are committed to the Humanitarian Charter and Minimum Standards in Disaster Response (SPHERE Project) in delivering assistance to the most vulnerable.

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>.

This operation sought to administer to the immediate requirements of the victims of this disaster. Subsequent operations to promote sustainable development or long-term capacity building will require additional support, and these programmes are outlined on the Federation's website.

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Relationship Management Department

Bekele Geleta
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INTERNATIONAL FEDERATION OF RED CROSS AND RED CRESCENT SOCIETIES

Interim report	
Annual report	
Final report	X

Appeal No & title: 12/2001 Ethiopia: meningitis outbreak

Period: year 2001 up to 27/11/2001

Project(s): PET514

Currency: CHF

I - CONSOLIDATED RESPONSE TO APPEAL

FUNDING	CASH		KIND & SERVICES		TOTAL INCOME
	Contributions	Reallocations	Goods/Services	Personnel	
Appeal budget	1,006,787				
less					
Cash brought forward					
TOTAL ASSISTANCE SOUGHT	1,006,787				
<u>Contributions from Donors</u>					
American Red Cross (DNUS)	68,680				68,680
Australian Red Cross (DNAU)	1,717				1,717
Australian Red Cross (DNAU)	23,347				23,347
British Red Cross (DNGB)	39,301				39,301
British Red Cross (DNGB)	60,931				60,931
Danish Red Cross (DNDK)	28,357				28,357
ECHO Meningitis Epidemic Response (351,440				351,440
Finnish Red Cross (DNFI)	51,449				51,449
German Govt.via German Red Cross (D	78,355				78,355
German Govt.via German Red Cross (D	38,899				38,899
Icelandic Red Cross (DNIS)	3,187				3,187
Swedish Red Cross (DNSE)	110,175				110,175
Swiss Government (DGCH)	50,000				50,000
British RC				9,856	9,856
TOTAL	905,838			9,856	915,694
Coverage	90.0%			1.0%	91.0%

II - Balance of funds

Opening balance	
CASH INCOME Rcv'd	905,838
CASH EXPENDITURE	-1,175,164

CASH BALANCE	-269,326

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III - Budget analysis / Breakdown of expenditures

Description	Appeal Budget	CASH Expenditures	KIND & SERVICES		TOTAL Expenditures	Variance
			Goods/services	Personnel		
<u>SUPPLIES</u>						
Shelter & Construction						
Clothing & Textiles						
Food/Seeds						
Water						
Medical & First Aid	590,500	834,750			834,750	-244,250
Teaching materials	10,000					10,000
Utensils & Tools						
Other relief supplies						
Sub-Total	600,500	834,750			834,750	-234,250
<u>CAPITAL EXPENSES</u>						
Land & Buildings						
Vehicles						
Computers & Telecom equip.		3,304			3,304	-3,304
Medical equipment						
Other capital expenditures						
Sub-Total		3,304			3,304	-3,304
<u>TRANSPORT & STORAGE</u>	149,500	80,706			80,706	68,794
Sub-Total	149,500	80,706			80,706	68,794
<u>PERSONNEL</u>						
Personnel (delegates)	123,190	12,148		9,856	22,004	101,186
Personnel (local staff)		84,001			84,001	-84,001
Training						
Sub-Total	123,190	96,150		9,856	106,006	17,184
<u>GENERAL & ADMINISTRATION</u>						
Assessment/Monitoring/experts	15,000					15,000
Travel & related expenses	1,800	4,993			4,993	-3,193
Information expenses	500	8,585			8,585	-8,085
Administrative expenses	5,550	11,872			11,872	-6,322
External workshops & Seminars						
Sub-Total	22,850	25,450			25,450	-2,600
<u>PROGRAMME SUPPORT</u>	110,747	134,805			134,805	-24,058
<u>OPERATIONAL PROVISIONS</u>						
Transfer to National Societies						
TOTAL BUDGET	1,006,787	1,175,164		9,856	1,185,020	-178,234

Consumption rate: Expenditures versus income 129%
Expenditures versus budget 118%