

CENTRAL AFRICAN REPUBLIC, CHAD, NIGER: MENINGITIS EPIDEMIC

5 March, 2001

appeal no. 09/2000

situation report no. 2 (final)

period covered: 1 May - 6 August 2000

Operations to fight meningitis epidemics in the Central African Republic (CAR) , Chad and Niger have been successful in saving lives and in promoting awareness of the disease and its prevention, in both rural and urban communities. In response to the Federation's Appeal, 200,000 doses of vaccine and vials of oily chloramphenicol were dispatched to each National Society through the International Co-ordinating Group (ICG) based in Geneva. An evaluation of the operations held in mid-June stressed the need for improved co-ordination at national level and emphasized the benefits of the role of the Red Cross volunteers in dissemination and social mobilization work.

Also, see the technical evaluation report on the operation attached as an annex.

The context

As of September 1999, throughout the meningitis belt which stretches from Ethiopia in East Africa to Senegal in West Africa, cases of cerebro-spinal (meningococcal) meningitis broke out and in several countries, including the Central African Republic, Chad and Niger, reached epidemic proportions. In general, there are epidemics of meningitis every seven to eight years in the affected countries, although recent trends indicate that the frequency of epidemics is increasing. Furthermore, since 1988, outbreaks are now occurring outside the traditional meningitis zone. WHO statistics show that by the end of 1999, there were 33,692 cases of meningitis throughout the African Continent, whereas as of May 2000, a total of 22,226 cases had been recorded.

Benin and Cameroon were affected by outbreaks of the disease, with WHO records showing a total of 918 and 334 cases respectively. In Benin, the previous epidemic took place in 1997, and between November 98 and May 1999 there were a number of outbreaks in three of the country's six administrative districts. In Cameroon, a vaccination campaign was undertaken by the Ministry of Health at the outset of the dry season, halting the progression of the outbreak.

The Regional Delegations for West and Central Africa were alerted to the epidemics in the regions and played a co-ordinating role, resulting in the organization of evaluation missions. The assessments were carried out in Chad and the Central African Republic by a member of the Federation's Epidemics Surveillance Team for West Africa and in Niger by a Federation resource person. To respond to the situation, the Federation launched Emergency Appeal 9/00 on 14 April 2000 to promote awareness campaigns and to provide vaccines and vials of oily chloramphenicol in support of the operations to fight the epidemic.

Latest events

The National Societies in the affected countries have worked alongside their governments in order to contain the epidemic, promote awareness and understanding of the disease and ensure appropriate vaccination coverage. In response to the Federation's Appeal, the National Societies of the Central African Republic, Chad and Niger received 200,000 doses of meningitis vaccine and a total of 15,000 vials of oily chloramphenicol distributed as follows: Niger - 6,000 vials; Chad - 6,000 vials; Central African Republic - 3,000 vials. Autodisable syringes and safety boxes were also dispatched. The Regional Health Delegates for West and Central Africa provided technical guidance on the social mobilization campaigns organized in favor of the affected zones and co-ordinated the dispatch of vaccines and medicines to the National Societies of Chad, the Central African Republic and Niger.

A meeting held in order to evaluate the response to the meningitis epidemic, focusing particularly on the role of the Red Cross, was organized in Yaoundé between 19 and 21 June 2000. Although Benin and Cameroon were not included in the Appeal, since concerted efforts from the government and the Red Cross Society succeeded in halting the progress of the epidemic, the National Societies also participated in the evaluation meeting and shared their experiences during discussions.

On 21 July, the Ministry of Health of the Central African Republic contacted the Federation Delegation for Central Africa with the information that a further outbreak of meningitis had flared in Basse-Kotto. The Regional Delegation will keep abreast of developments through the MoH and the Pasteur Institute of Bangui, particularly since the arrival of the rainy season did not result in stifling the spread of the disease.

Red Cross/Red Crescent action

Benin

Between late 1999 and mid 2000, there were a total of 1,003 meningitis cases in Benin, resulting in 63 deaths which occurred in two regions: Atacora and Borgou. Since the 1997 epidemic, the percentage of fatalities has been reduced from 17.6% to 6.28%. Following the epidemic in 1997, the Red Cross Society of Benin has an agreement with the Ministry of Health and is included in a national strategy set up to fight potential epidemics. Initial information that cases of meningitis had broken out reached the Headquarters through Red Cross first aiders working in the field. First aid workers were then mobilized to work within the affected communities providing advice. Following co-ordination between local and regional health authorities, a vaccination campaign was organized and the Red Cross Society of Benin worked to register those vaccinated and, through IEC techniques, to encourage communities to attend vaccination sessions and to improve hygiene. Some 250 volunteers, including 22 trainers and 12 officers, were involved in the operation. For those who had fallen ill with the disease, family members were encouraged to take the patient for consultation at a medical centre and advice and information were provided to relatives and friends.

For the future, the Red Cross Society of Benin aims to set up a training programme for first aiders who act as links with the community in relation to prevention of epidemics. The National Society also plans to formulate plans for disaster management and emergencies at regional level and outside main urban settings.

Cameroon w

In Cameroon, the epidemic affected three Provinces: the South-West, North West and Western Provinces. The first cases were detected in the district of Wabane in early March 2000. In the South West, by 15 March there had been 10 deaths and 5 people were under treatment in four villages. In the North West, as of 28 March, there were 12 cases and 5 deaths recorded in the Batibo District, while in the West, 38 cases and 6 deaths were recorded at the District Hospital of Dschang. An alert was issued on national radio and the Ministry of Health dispatched teams of staff to the field. The Cameroon Red Cross Society and the Federation's Delegation for Central Africa undertook an evaluation mission in the South-West and North-West between 28 and 30 March 2000. As this mission was setting out, large numbers of people from Lebialem in the West, alarmed by the situation, came to the Red Cross Headquarters in order to seek advice and support. In co-ordination with the Ministry of Health, it was decided to undertake awareness work and to carry out vaccination sessions. Red Cross first aiders and nurses from the Cameroon Red Cross's Medico-Social Centre were at the forefront of this initiative. A total of 372 people were therefore vaccinated in the affected areas.

Central African Republic w

In the Central African Republic, the most recent epidemic of meningitis dates back to 1993. As of September 1999, the epidemiological surveillance unit within the Ministry of Health and Population recorded an unusually high number of cases of meningitis, resulting in an alert issued by the government on 23 February 2000. An emergency committee was set up, composed of representatives of the Ministry of Health, the Ministry of the Interior and of Defense, the WHO, MSF, UNICEF, the Pasteur Institute, and the Central African Red Cross Society. The emergency committee aimed to reduce mortality rates and to prevent the spread of the epidemic. Through concerted action, the committee was to ensure a vaccination coverage of at least 85% in the regions affected by the epidemic and to reinforce appropriate treatment of meningitis cases. The committee allocated responsibility for health regions 3 and 4 to MSF and regions 1, 2 and 5 to the Red Cross. The Central African Red Cross Society drew up a plan of action focusing on training and awareness work. The Regional Delegation for Central Africa provided 220 brochures on epidemics from the manual on first aid in the community which were sent out to the National Society branches to facilitate briefing sessions. Furthermore, the page relating to meningitis was translated into the national language of each Branch. Local radio stations issued Red Cross messages on meningitis three times every day to the public. 30 volunteers were provided with refresher training on epidemics, with particular emphasis on those which are most frequent in the Central African Republic: cholera, meningitis and measles. In order to ensure a prompt response, the Central African Red Cross Society borrowed 52,500 doses of vaccine from Médecins sans Frontières. Cold storage facilities and vaccine carriers were put at the disposal of the National Society by the Expanded Vaccination Programme and a vehicle was hired to transport the necessary equipment. 15 volunteers from the Headquarters and a further 15 from each branch were mobilized.

In Carnot (health region 2), a three day vaccination campaign took place between 21st and 23rd April. Of the total population of 32,000 inhabitants, 25,855 people over the age of two were vaccinated - giving a coverage of 81%. Personnel from the Health Centre in Carnot were mobilized to carry out the vaccinations, whilst Red Cross volunteers assisted with the

organization and record-keeping. Furthermore, 1,050 additional doses of vaccine were provided to the health centre so that coverage could be increased. In the town of Bouar (health region 2), 800 doses of vaccine had been administered to the military since the outbreak of the disease had begun in the local barracks. 45 members of personnel from the local hospital and 15 Red Cross volunteers took part in a vaccination campaign over two days between 25 and 27 April. A total of 22,089 persons were vaccinated of a population of 30,000 inhabitants. 2,500 further doses of vaccine were provided to the local hospitals well as kits of oily chloramphenicol for the treatment of up to 1,000 cases.

The Central African Red Cross Society, following information that outbreaks had occurred in Mboki, forwarded 500 doses of vaccine in order to vaccinate health personnel. Further action was not undertaken since the minimum number of cases for the outbreak to be considered as an epidemic were not reached. In health region 1, a small number of sporadic cases only were recorded.

On 24 July, the Ministry of Public Health of the Central African Republic contacted the Federation Delegation for Central Africa in order to inform of a further outbreak of meningitis in the Basse Kotto region. Two villages in the district of Mingala and three villages in the Alindao district were affected with a total of 40 cases and 14 deaths between 19th and 27th July. It was therefore decided to vaccinate the 35,000 inhabitants of these districts, and 30,000 doses of vaccine and 500 vials of oily chloramphenicol for Alindao, and Mingala, and 58,000 doses of vaccine for Bangassou, Bakouma and Rafai were allocated from the Central African Red Cross Society's stock. 15 Red Cross volunteers were mobilized to assist teams from the Ministry of Health during the vaccination campaign which took place over one week. The refugee camp in Mboki had to be vaccinated. 10,000 doses were given by the red cross to persons aged between 2 and 40 years. This is an unusual development in view of the fact that the arrival of the rainy season has not halted the spread of the disease.

Following the withdrawal of a further doses of vaccine for vaccination of the population of the affected zone in Basse Kotto and others. A total of 49,638 doses are kept in the cold chamber as property of the Central African Red Cross Society and their usage will be determined in co-operation with the MoH.

Use of Vaccines			
Borrowed from MSF			55,000
	Carnot -	25,855	29
	Bouar -	22,089	7,056
	Additional vaccines - Carnot	1,050	6,006
	Additional vaccines - Bouar	2,500	3,506
	Losses	368	3,138
	Mboki	500	2,638
	Returned to MSF	2,638	0
Received from Federation			200,000
	Returned to MSF	52,362	147,638
	Mingala & Alindao	30,000	117,638
	Bangassou, Bakouma, Rafai	58,000	59,638
	Refugees in Mboki	10,000	49,638
	Ministry of Health/RCCA	49,638	0

Chad w

As of mid December 1999, cases of meningitis broke out in East Logone, West Logone, Moyen Chari, Tandjile and Mayo-Kebbi in the South of Chad. A technical surveillance committee undertook an evaluation mission in early April as a result of the steadily

increasing numbers of cases. The mission, made up of representatives of the WHO, UNICEF and MSF, recorded the doubling of numbers of cases per week and confirmed the existence of an epidemic. As of 4 April, 4,228 cases were registered with 526 deaths - a mortality rate of 11%. The Red Cross of Chad began discussions with the Ministry of Health, resulting in the official declaration of an epidemic on 28 March 2000. As a first step, the National Society issued information letters to all its Branches, notifying them to take measures to prevent the further spread of the epidemic.

The Red Cross of Chad provided a total of 650 first aiders who assisted the Ministry of Health in a campaign to vaccinate affected populations and treat those who had contracted the disease. A total of 2,174,573 people were vaccinated. 500 vials of oily chloramphenicol were provided to the health districts of East Logone, West Logone, Moyen-Chari and Tandjilé, whilst Chari-Baguirmi and Mayo-Kebbi received 250 vials. The Red Cross of Chad organized training sessions for a total of 290 first aiders to optimize their contribution to the awareness work. Furthermore, in Moyen-Chari, the Red Cross of Chad organized a vaccination campaign from 6th to 16th May with the vaccines forwarded by the Federation. This operation was implemented through the assistance of 30 volunteer first aiders, a supervisor, a co-ordinator and a driver. 5,232 people were therefore vaccinated in 22 villages within the health districts of Sarh and Danemadj. In N'Djamena, the National Society provided 2,400 doses of vaccine and mobilized 20 trained volunteers in support of the MoH's campaign to vaccinate school children. A further 150,000 doses of vaccine were officially donated to the Ministry of Health to vaccinate persons living in the slums of N'Djamena and the balance of 42,300 doses remains with the Red Cross of Chad for use when further cases occur during the next dry season.

Since there are outbreaks of meningitis on an annual basis, the Red Cross of Chad will ensure that each branch has a group of trainers who are able to put in place a strategy for prevention of meningitis and cholera epidemics. In order to reinforce this initiative, a training of trainers' workshop was held in N'Djamena from 9th to 14th June for 28 participants from 15 branches.

Use of Vaccines			
Received from Federation			200,000
	Sahr/Danemadj	5,232	194,768
	N'Djamena	2,400	192,368
	Losses	68	192,300
	Ministry of Health	150,000	42,300
	Stock - Red Cross of Chad	42,300	0

Niger w

In Niger, the most recent epidemic of meningitis broke out in 1995 with 40,000 cases and 4,000 deaths. This year, as of May 2000 the National Health Information System (SNIS) provides statistics according to which 11,714 cases were recorded with 857 deaths and a mortality rate of 7.31%. Given the scale of the epidemic, the government of Niger launched an international appeal in order to cover needs relating to vaccines estimated at 4,700,000 doses. The Red Cross Society of Niger has drawn up a project focusing on information, education and communication relating to epidemics and, in particular, to meningitis. This plan entitled "Social Mobilization Plan against Epidemics" aims to promote awareness and educate populations in order that they adopt appropriate behavior reinforcing preventive action to reduce the impact of epidemics. The National Society therefore plans to organize eight three-day training sessions for 85 first aiders in the country's eight regions.

In Niamey, between 1st January and 14 April, 2,281 cases were notified with 138 deaths - a mortality rate of 6.05%. The age-group which was most affected was the 20 - 29 years age

range. Given the fact that the national hospital in Niamey was overwhelmed with meningitis cases, on 27th March 2000, the Lazaret Centre was opened. A team of 18 Red Cross volunteers made up of one doctor, 14 first aiders, 2 co-ordinators and one ambulance driver took part in the Lazaret operation. The first aiders were divided into three groups and were allocated the following tasks: cleaning of the premises of the temporary hospital, transportation of the ill from the treatment centre to their rooms, awareness sessions at the hospital focusing on transmission of the illness, the symptoms of the illness and how to prevent contamination.

As part of the awareness campaign, the government issued radio messages to the public. The MoH began vaccination work in March, continuing throughout the critical period of the epidemic. In the region of Tillabéri, the MoH worked in co-operation with MSF in order to vaccinate populations at risk. The supply of 200,000 doses of vaccine from the Federation was donated to the Ministry of Health during an official ceremony on 23 May 2000. The vaccines contributed to the success of the Ministry of Health's vaccination campaign which included the Commune of Niamey II where a total of 215,256 persons were vaccinated against the disease.

Use of Vaccines		
Use of Vaccins		
Received from Federation		200,000
	Commune - Niamey II	200,000

Outstanding needs

There are no outstanding needs for this Appeal.

External relations - Government/UN/NGOs/Media

The National Red Cross Societies involved in the meningitis operations worked in collaboration with the Ministry of Health, the WHO, UN agencies and other NGOs, in particular, Médecins Sans Frontières. The evaluation meeting held in Yaoundé in mid June 2000 reviewed this co-operation and made recommendations for the future which highlight the importance of efficient co-ordination and the necessity of setting up ICG committees at national level in order to facilitate a prompt and appropriate response to meningitis epidemics. Both international and national press coverage of the meningitis operations was limited.

Contributions

See Annex 1 for details.

Conclusion

The Red Cross and Red Crescent Societies are well placed to undertake social mobilization work in relation to the prevention of epidemics. In the case of the epidemic in 1999/2000, in several instances, initial cases of meningitis in isolated communities were notified by Red Cross volunteers. The vast network of volunteers on the ground are in a key position to influence the behavior of local populations and to reinforce their understanding of meningitis and how to prevent its spread. The meningitis operations conducted in the Central African Republic, Chad and Niger, were appropriate and indeed saved many lives, but their

implementation was delayed. As a result, a large quantity of vaccine reached the country at a late stage and is now in stock with either the Ministry of Health and/or the National Society for use in vaccination campaigns at the onset of the next dry season. The slow response is in part due to the essential need for improved surveillance and the provision of reliable and consistent data in order to launch a response at international level. Improved co-operation between government authorities, the WHO and NGOs together with the setting up of national co-ordinating bodies with clearly defined roles, is seen as vital as the key to ensuring swift and appropriate responses to future epidemics.

Further details on the evaluation of the meningitis operation are provided in the attachment.

For further details please contact: Anne Kirsti Vartdal, Phone : 41 22 730 4485; Fax: 41 22 733 03 95; email: vartdal@ifrc.org

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>.

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Central Africa - meningitis						
Appeal No: 09/2000						
Period: April to February 2001 provisional (26.02.01)						
Currency: CHF						
III - Budget analysis / Breakdown of expenditures						
Description	Appeal Budget	CASH Expenditures	KIND & SERVICES		TOTAL	Variance
			Goods/services	Personnel	Expenditures	
SUPPLIES						
Shelter & Construction						
Clothing & Textiles		15			15	(15)
Food/Seeds						
Water						
Medical & First Aid	278,417	261,652			261,652	16,765
Teaching materials						
Utensils & Tools		60			60	(60)
Other relief supplies						
Sub-Total	278,417	261,726			261,726	16,690
CAPITAL EXPENSES						
Land & Buildings						
Vehicles						
Computers & Telecom equip.						
Medical equipment						
Other capital expenditures						
Sub-Total						
TRANSPORT & STORAGE	59,995	65,091			65,091	(5,096)
Sub-Total	59,995	65,091			65,091	(5,096)
PERSONNEL						
Personnel (delegates)	44,832	20,695			20,695	24,137
Personnel (local staff)		63,618			63,618	(63,618)
Training						
Sub-Total	44,832	84,313			84,313	(39,481)
GENERAL & ADMINISTRATION						
Assessment/Monitoring/experts		4,740			4,740	(4,740)
Travel & related expenses	7,500	14,546			14,546	(7,046)
Information expenses	2,500	1,019			1,019	1,481
Administrative expenses	55,000	28,030			28,030	26,970
External workshops & Seminars						
Sub-Total	65,000	48,334			48,334	16,666
PROGRAMME SUPPORT	55,401	55,424			55,424	(23)
OPERATIONAL PROVISIONS						
Transfer to National Societies						
TOTAL BUDGET	503,644	514,888			514,888	(11,244)

Meningitis Appeal - CAR, Chad, Niger						ANNEX 1
APPEAL No. 09/2000		PLEDGES RECEIVED			02/19/01	
DONOR	CATEGORY	QUANTITY	UNIT	VALUE CHF	DATE	COMMENT
CASH						
REQUESTED IN APPEAL CHF ----->				503,644		TOTAL COVERAGE 85.4%
Balance carried forward from 1999				0		
BRITISH - RC		20,000	GBP	52,500	05/02/00	
CANANDA - GOVT/RC		100,000	CAD	111,980	05/08/00	NIGER
FINLAND - RC		33,637	EUR	54,206	04/20/00	CAR
MONACO - RC		20,000	FRF	4,794	04/14/00	CAR
NETHERLANDS - RC				50,000	04/19/00	
NORWAY - RC		200,000	NOK	39,595	04/18/00	
SPANISH - RC		2,500,000	ESP	23,625	05/05/00	MEDICAL ITEMS
SWEDEN - RC		500,000	SEK	93,350	04/18/00	
SUB/TOTAL RECEIVED IN CASH				430,050	CHF	85.4%
KIND AND SERVICES (INCLUDING PERSONNEL)						
DONOR	CATEGORY	QUANTITY	UNIT	VALUE CHF	DATE	COMMENT
SUB/TOTAL RECEIVED IN KIND/SERVICES				0	CHF	0.0%
ADDITIONAL TO APPEAL BUDGET						
DONOR	CATEGORY	QUANTITY	UNIT	VALUE CHF	DATE	COMMENT
SUB/TOTAL RECEIVED				0	CHF	
THE FOLLOWING PROJECTS ARE LINKED TO THIS APPEAL:				P62905		
P62905						

TECHNICAL EVALUATION OF THE OPERATION

This report should be read in conjunction with the final situation report (see above) on the meningitis operation, issued on 19 February, 2001.

In general, there are epidemics of meningitis every seven to eight years in the countries falling within the "meningitis belt", although recent trends indicate that the frequency of epidemics is increasing. As of mid December 1999, cases of cerebro-spinal (meningococcal) meningitis were reported in Benin, Cameroon, Chad, the Central African Republic (CAR) and Niger, resulting in a fully-fledged epidemic in Chad, CAR and Niger by April 2000. By the end of May, in Chad the number of people affected by the epidemic had reached 7,454 cases with 823 deaths (mortality rate: 11%), the worst-affected regions of East Logone, West Logone, Moyen Chari and Mayo Kebi bearing the heaviest toll. In CAR, by the end of May, 2,584 cases and 432 deaths were recorded (mortality rate: 17%). The arrival of the rainy season halted the epidemic firstly in the capital, Bangui, and gradually throughout the rest of the country. However, in an unusual development, a further outbreak of the disease occurred in late July in two districts in the region of Basse-Kotto in the South East, with 40 cases and 14 deaths reported. In Niger, with the addition of incomplete figures for the month of June, a total of 13,231 cases and 978 deaths had occurred (mortality rate: 7.4%). The outbreaks were halted in Cameroon through a mass vaccination campaign undertaken by the Ministry of Health at the outset of the dry season and in Benin through the rapid deployment of the national rapid intervention team to ensure provision of vaccines and oily chloramphenicol.

Description of Appeal

In order to conduct vaccination campaigns, the governments of Chad, the CAR and Niger had appealed for a total of 1,500,000, 2,235,035 and 4,700,000 doses of vaccine respectively. An evaluation mission carried out in March 2000 by a member of the Epidemics Surveillance Team for West Africa confirmed the need for urgent action on the part of the National Societies and the Federation to avoid further loss of life. In this context, in April 2000, the International Federation launched an Appeal to provide a total of 600,000 doses of vaccine and 15,000 vials of oily chloramphenicol to the National Societies of Chad, the Central African Republic and Niger. The Appeal also focused on the mobilisation of Red Cross volunteers for dissemination work in the affected communities, providing information to the population on meningitis, advising on how to prevent the spread of the disease, identifying cases for treatment and encouraging those at risk to attend vaccination sessions. Information and awareness building documentation formed part of the Appeal, together with material for a hygiene initiative to be carried out at the hospital to which meningitis cases were referred in Niamey. Benin and Cameroon were not included in the Emergency Appeal since initiatives taken at national level succeeded in halting the spread of meningitis.

The Appeal covered the staging of an evaluation of the operation in response to the meningitis operation. The evaluation meeting took place from 19th - 21st June in Yaoundé where conclusions were drawn as a result of exchanges of experience and analysis of the implementation of the operation in each country.

Implementation and Achievements

In Chad, the CAR and Niger, the National Societies were involved at an early stage in the response to the outbreak of meningitis. Volunteers from isolated villages were the first to draw the attention of the health authorities of Chad and the Central African Republic to the outbreak of the disease. With funding from the Appeal, the Federation, through the

International Co-ordinating Group in Geneva, provided a supply of medicines and 200,000 doses of meningitis vaccines. These arrived in the Central African Republic on 26th April and in Chad on 28th April. The Red Cross of Niger received the vaccines on 18th May as further fund-raising efforts were required to cover needs for each of the three National Societies.

Each of the National Societies affected by the meningitis epidemic was active in awareness-raising campaigns through the commitment of volunteers on the ground who, for example, assisted MoH personnel with record-keeping and organisation of vaccination sessions, provided advice and information to relatives of those suffering from meningitis, explained how to prevent the spread of meningitis and participated in training courses to optimise their contribution to the awareness work.

In the case of Chad, 150,00 doses of vaccine were donated to the Ministry of Health and the Red Cross of Chad has retained a stock of 42,300 doses for use when further cases occur during the next dry season. As for CAR, a total of 100,00 doses are retained in cold storage with the Ministry of Health and their use will be decided jointly by the MoH and the Central African Red Cross Society.

Vaccination campaigns using vaccines supplied by the Federation via the ICG were organised and implemented as follows:

National Society	Areas Affected	Number of persons vaccinated	Awareness campaign	Number of Red Cross volunteers
Chad	East Logone, West Logone, Moyen Chari, Tandjile, Mayo-Kebbi	7,632 Sahr, Danemadj N'Djamena	East Logone, West Logone, Moyen-Chari Tandjilé Chari-Baguirmi Mayo-Kebbi	700
Central African Republic	Health regions 2, 3, 4	93,444 Health region 2 - West RCA, - Carnot, Bouar + Mingala and Alindao South East RCA	Health region 2 incl. use of leaflets & radio messages	60
Niger	Niamey, Birni N'Konni, Téra, Tillabéri	200,000 Niamey Commune II	Lazaret temporary hospital, Niamey hygiene campaign support to patients and relatives	18 Plans to train 85 first aiders in IEC techniques

Problems and Constraints

The major problem identified by the evaluation meeting was the late response to the meningitis epidemic, given that outbreaks had begun as early as December 1999. The reasons underlying the delayed reaction were various. The most significant cause was the late declaration of the epidemic by the respective governments. This was brought about by difficulties in obtaining coherent epidemiological data and the need to ensure that the official minimum number of cases proving the existence of an epidemic (15 for 100,000 inhabitants) had been reached. In the Central African Republic, for example, an epidemic had not been

officially declared in March 2000 when the representative of the Regional Health Surveillance team carried out an assessment at the height of the outbreak. Nevertheless, a national emergency cell had been set up with representation from WHO, UNICEF, MSF, the MoH and the Red Cross Society. In Chad, cases of meningitis had been occurring since mid December 1999. However, a technical surveillance committee including representatives of the WHO, UNICEF and MSF undertook an evaluation mission only in early April. As a result of this mission, the fact that numbers of cases were doubling each week resulted in the official acknowledgement of the existence of an epidemic. Each of the National Societies experienced problems in providing epidemiological data which were aggravated by communication difficulties between Headquarters and the branches. The lack of reliable data and epidemiological analysis provided to the Regional Delegations and to the Federation Secretariat complicated the Secretariat's liaison role with the International Co-ordinating Group in Geneva. The Regional Delegations for West and Central Africa experienced difficulties in obtaining information on the epidemics as well as needs in relation to vaccines since overall intervention strategies and the specific role of the Red Cross were unclear. Difficulties also occurred with the implementation of operations as a result of poorly functioning national co-ordination groups and task forces which failed to ensure regular meetings, to monitor progress and to attribute clearly-defined roles.

Following the issue of the Federation's appeal in mid April, a further constraint was the need to raise funds for the provision of oily chloramphenicol and vaccines before these could be shipped to the National Societies. Given the need for urgent action, this was the reason why the Central African Red Cross Society borrowed 52,500 doses of vaccine from Médecins Sans Frontières to begin a vaccination campaign, which were later returned once the Federation vaccines had reached the country. As a result of the late shipment of vaccines, a large quantity of doses of vaccine remains in storage in Chad and the Central African Republic.

Lessons learned

The meningitis operation carried out in Benin served as a positive example of well-functioning co-operation with partners. Following the epidemic of meningitis in 1997, the Red Cross Society of Benin has an agreement with the Ministry of Health and is included in a national strategy to fight potential epidemics. Co-ordination between local and regional health authorities and the Red Cross resulted in the timely setting up of a vaccination campaign in which the Red Cross participated through awareness work - encouraging communities to attend vaccination sessions, explaining the need to take the sick for consultation at a medical centre and providing advice and information.

- Participants at the meeting agreed on the need to integrate Red Cross action in an overall national strategy to fight epidemics. There is a need for reinforced co-operation with other partners in the management of a response to an epidemic. Task forces and emergency committees should include Red Cross representation and should meet regularly to monitor progress. The Red Cross Society of Benin aims to set up a training programme for first aiders who act as links with the community and can take prompt action to prevent the spread of epidemics.
- The meeting was of the view that greater emphasis on training and refresher courses for their volunteers was required *before* the arrival of the dry season which is conducive to the spread of meningitis. It was clear that the lack of preparedness on the part of the National Societies also hampered their ability to ensure an appropriate and prompt response to the outbreaks of meningitis.
- Participants felt convinced that the National Societies needed to draw up a preparedness plan for epidemics, as well as to evaluate the capacity of the Society to intervene and

provide assistance. It was essential to prepare plans involving both the Headquarters and the Branches which aimed to counter the spread of epidemics in general. Each of the National Societies had experienced difficulties in providing coherent epidemiological data.

- Participants emphasised the need for improved communication facilities between Headquarters and the Branches in high-risk areas. One of the main conclusions of the evaluation was that the role of the Red Cross in response to epidemics should be oriented towards social mobilisation, rather than the provision of medicine and/or vaccines or the setting up of vaccination campaigns. Awareness-building and sensitisation work in vulnerable communities could be effectively carried out by the Red Cross, given the commitment of large numbers of volunteers in the field.

Recommendations

There was agreement that each of the Federation components involved in the meningitis operation, together with the government authorities and other organisations working in the field of health, could improve both co-ordination and implementation work in the event of an epidemic of meningitis. This would result in improved identification of populations at risk and more efficient vaccination campaigns, supported by effective awareness-building in affected communities. Discussions at the meeting resulted in the following recommendations which describe how each involved party may reinforce its contribution to meningitis response and thereby strengthen the overall impact on the health of the most vulnerable.

It is recommended that the **government(s)** of the country(ies) concerned by a meningitis outbreak should:

- take the lead in the co-ordination of activities in the field by all partners;
- ensure the availability of an emergency stock of meningitis vaccines.

It is recommended that the *National Societies* should:

- draw up a plan for fighting epidemics in general, together with a specific plan in the event of outbreaks of meningitis;
- be in a position to provide an analysis of epidemiological data as well as a plan of action detailing their role in vaccination campaigns together with details of needs;
- ensure relevant refresher training for their volunteers;
- put pressure on their governments to make a prompt declaration of the outbreak of an epidemic to facilitate emergency aid.

It is recommended that the *Regional Delegations* should:

- reinforce their support to the National Societies in the region to develop their capacities and resources so that they are better prepared for health emergencies;
- intensify advocacy work with National Society governance in favour of increasing allocation of responsibility to the National Society programme officers;

It is recommended that the *Federation Secretariat* should:

- reinforce partnerships with other agencies and organisations with a view to drawing up agreements which ensure the involvement of the National Societies in the emergency committees set up at national level in the event of an epidemic;
- react rapidly once an Appeal has been launched and ensure that vaccines are purchased and shipped immediately;

- response unit should be part of the epidemic task force so as to ensure rapid release of emergency fund.