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Emergency Plan of Action Final Report

Comoros: Preparedness for Plague outbreak

 International Federation
of Red Cross and Red Crescent Societies

DREF operation n°: MDRKM006	Glide number:
Date of Issue: 22 June 2018	Date of disaster: October 2017
Operation start date: 18 October 2017	Operation end date: 18 January 2018
Host National Society: Comoros Red Crescent	Operation budget: CHF 67,937
Number of people affected: 819,286 (Population at risk)	Number of people assisted: 204,821 (25% of the caseload)
Host National Society Presence: 3,000 volunteers, 56 staff in the Island's 3 Regional Committees and 28 local committees directly supported the operation. 200 volunteers were mobilized and trained to support the response.	
N° of Red Cross Red Crescent Movement partners actively involved in the operation: 3 (IFRC, French Red Cross, PIROI and ICRC)	
N° of other organizations involved in the operation: 2 (WHO and Ministry of Public Health)	

A. SITUATION ANALYSIS

Description of the disaster

Madagascar regularly experiences seasonal outbreaks of bubonic plague and the outbreaks normally extend from August to April each year. In 2017 however, the first cases of person to person transmission via pneumonic plague occurred. The first death of a patient infected with the plague was notified on 27 August 2017. Plague cases were reported in 20 districts across Madagascar as of 3 October, with the cumulative number of cases reported by this date being 194 with 50 deaths (case fatality rate 15.5)¹ recorded, 124 of the cases were recorded as pneumonic transmission. The occurrence of pneumonic transmission in urban areas posed the risk of substantial spread and high caseload required urgent and comprehensive response to save lives.

Specimens from suspected cases were submitted to the *Institute Pasteur de Madagascar* and confirmed cases were identified by either polymerase chain reaction or rapid diagnostic tests. Antananarivo was one of the most affected areas, followed by the port city of Toamasina, and the rural district of Faratsiho. Of the total deaths from the plague, one was a foreigner who was visiting Madagascar and at least 8 health care workers were infected.

Plague can be a very severe disease in people, particularly in its septicaemic and pneumonic forms, with a case-fatality ratio of 30%-100% if left untreated. The pneumonic form is invariably fatal unless treated early, is especially contagious and can trigger severe epidemics through person-to-person contact via droplets in the air.²

Untreated pneumonic plague can be rapidly fatal, so early diagnosis, referral and treatment is essential for survival and reduction of transmission and complications. Antibiotics and supportive therapy are effective

¹ WHO. October 4, 2017. Plague Outbreak Madagascar. Retrieved from <https://reliefweb.int/sites/reliefweb.int/files/resources/Ext-PlagueMadagascar4102017.pdf>

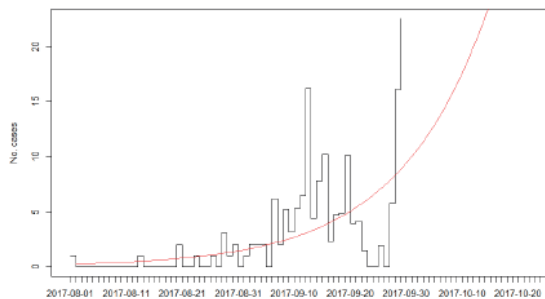
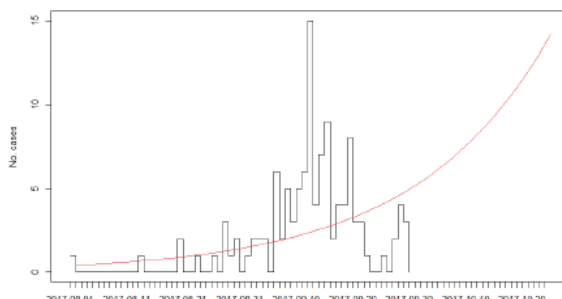
² <http://www.who.int/csr/disease/plague/en/>

against plague if patients are diagnosed in time. Pneumonic plague can be fatal within 18 to 24 hours of disease onset if left untreated.³

Based on the Epidemiological modeling done for the outbreak in Madagascar the following could happen:

Assuming no reporting delay ($R_0=1.30$), estimates 219 additional cases in next 24 days, or **9 new cases per day**.

Assuming a one week reporting delay ($R_0=1.44$), estimates 577 additional cases in next 24 days, or **24 new cases per day**.



The above projections were however on the lower side because the total number of new cases reported after the modeling (issued on 6 October 2017) showed that within 1 week, the number of plague cases had reached nearly half of the projected estimates for a three week period i.e. 6 Oct (231 cases, 33 deaths, CFR 14.3%), on 30 September 2018 (133 cases, 24 deaths, CFR 18.0%). Based on number of new cases reported it was projected that the total number of cases over 24 days will be 960 against the projected 219 and 577 in the modelling.

It was also noted that the recent cases were without an apparent epidemiological link to the index case ([WHO Response Plan](#)). This implied multiple separate outbreaks, aerosolized transmission (as compared to persons-to-person), or that existing contact tracing remained incomplete, thereby further supporting the assumption of a case identification lag.

There was moderate risk that the outbreak could be a regional outbreak with Seychelles already having one confirmed case of its citizen who travelled from Madagascar as well as another citizen who died from the plague in Madagascar. As there is regular travel and contact between the Comoros Islands and Madagascar with approximately 350 people traveling from Madagascar into Comoros per week, there was a potential that the plague may be imported into the Comoros and therefore there was a need to prepare the Comoros Red Crescent Society to respond to the epidemic.

The Comoros RC Society (CRCo) received a DREF grant of CHF 67,937 for preparedness on plague for community surveillance for 204,821 (25% of the caseload) people at risk through provision of training of volunteers on the plague, mass awareness and community engagement and accountability activities.

The major donors and partners of the DREF include the Red Cross Societies and governments of Australia, Austria, Belgium, Britain, Canada, Denmark, Finland, Ireland, Italy, Japan, Luxembourg, Monaco, the Netherlands, Norway, Spain, Sweden and the USA, as well as DG ECHO, the UK Department for International Development (DFID), AECID, the Medtronic and Zurich Foundations and other corporate and private donors. On behalf of the Comoros Red Crescent Society (CRCo), the IFRC would like to extend its gratitude to all partners for their generous contributions.

Summary of response

Overview of Host National Society

The CRCo is a humanitarian organisation whose focus is on supporting and implementing programmes on youths, first aid, health activities as well as promotion of humanitarian principles and values, water and sanitation and hygiene, disaster risk reduction, vulnerability and capacity assessment in the communities of Comoros Islands. The National Society (NS) has strong community presence through its volunteers' network

³ <http://www.who.int/mediacentre/factsheets/fs267/en/>

in 28 committees across the three Islands of Comoros. The NS collaborates with government departments in the implementation of its community-based interventions.

The CRCo, as an auxiliary to the public authorities, was mobilized from the first monitoring meetings on the risk of the epidemic spreading. CRCo attended coordination meetings to enhance national preparedness as well as participating in the development of a national contingency plan. The NS also deployed 41 trained volunteers to ports and airports to sensitize travellers on the plague on the 3 islands.

Overview of Red Cross Red Crescent Movement in country

The French Red Cross has been present in the Comoros since 2000. It has supported the CRCo, a member of the Regional Intervention Platform of the Indian Ocean (PIROI) program, during disasters such as the cholera epidemics in 2002 and 2007, the air crash, floods in 2003 and 2012 and cyclone Hellen in 2014. The French Red Cross with the CRCo has been developing a program of strengthening the health system, improving quality of care and to raise awareness of good health practices.

The IFRC's Eastern Africa and Indian Ocean Islands Cluster (EAIIOI) coordinated with the French Red Cross in the development of this response plan. While IFRC supported CRCo through the release of DREF funds for this operation, the French Red Cross supported the NS through deployment of Personal Protective Equipment (PPEs) which would be used by NS volunteers in the event of an outbreak.

Overview of non-RCRC actors in country

At government level, a preparedness plan for the plague epidemic was developed. Restricted technical (Ministry of the Health / WHO) and multi-sectoral meetings took place on 5, 6 and 7 October 2017 to propose a document. As a result, a crisis unit under the responsibility of the Secretary General for Health was set up and thereafter met every day to monitor the situation and make the corresponding decisions. The vice-president in charge of transport published a note to suspend the movement of small merchant boats between the Comoros and Madagascar on 9 October 2017.

Disinfection procedures were implemented in ports and airports. Teams consisting of Emergency Relief and Preparedness Centre (COSEP) volunteers, CRCo, a doctor and the paramedics were deployed upon arrival to sensitize passengers from Madagascar on clinical signs and the necessity of consulting a doctor with the slightest symptoms.

At regional level, the Indian Ocean Commission's (IOC) Health Surveillance Unit has set up a preparation plan for IOC Member States at risk:

- Supply to the competent administrations of Comoros, Mauritius and Seychelles via the Pasteur Institute of Madagascar, rapid diagnosis kits to be used in case of suspected infection of a traveller returning to Madagascar;
- Supply of 50 personal protective equipment (PPE) to the Comoros Ministry of Health (MoH).
- Daily updates on the epidemic situation and dissemination of protocols for surveillance, response and management through the Indian Ocean Commission (IOC) and its SEGA (Epidemic Surveillance and Alert Management) network.

Needs analysis and scenario planning

Following the outbreak of the plague in Madagascar two suspected cases of the plague were reported in Seychelles including 1 death of a Seychelles citizen who had travelled to Madagascar. These two cases demonstrated a moderate risk that the plague could possibly become a Regional Outbreak. The risk was attributed to regular travel and contact between the Indian Ocean Islands countries.

Given the limited capacity of the of the health delivery system in Comoros to cope with the potential outbreak, there was a need to support the NS to work with the local authorities to implement preparedness activities to respond to the potential outbreak. The preparedness activities focused on:

- Coordination with the Ministry of Health
- Surveillance, monitoring and assessment of the situation
- Capacity building of NS staff and volunteers through trainings

- Pre-positioning of essential response equipment including PPEs in Comoros
- Communication community sensitization on the plague using IEC and visibility materials

Targeting

The DREF operation targeted 204,821 people in the Comoros with information on the Plague. To be able to reach this same numbers in the event of an outbreak in Comoros, the DREF operation targeted staff and volunteers of CRCo with trainings and preparedness activities. This would prepare the teams in the event of any mobilisation and deployment to support the response in the event of an outbreak. The activities targeted the high-risk areas including ports and airports.

Risk Analysis

There were no anticipated risks that could affect the implementation of the operation. The NS has access to all its branches and volunteers. An RDRT was deployed to work with the NS to ensure quality and accountable implementation of the operation.

B. OPERATIONAL STRATEGY

Proposed strategy

The overall objective of the operation was to build the preparedness capacity of CRCo to respond to a potential Plague outbreak. The NS plan was complemented the national response plan.

This objective was achieved through the implementation of the following activities:

- Coordination with local health partners and WHO
- Continuous monitoring of the Plague response in Madagascar
- Rolling out of trainings with support from IFRC and PIROI
- Procurement and pre-positioning of response items

The NS participated in a 3-day workshop organised by the Ministry of Health to develop a preparedness plan to respond to the plague. As a member of a crisis committee established by the Ministry and chaired by the Secretary General for Health, the NS attended planning and monitoring meetings. A RDRT was deployed for one and a half month and supported the NS to deliver trainings, to implement community sensitisation activities as well as to develop IEC materials and key messages on the Plague.

C. DETAILED OPERATIONAL PLAN



Health

People reached: 24,262

Indicators:	Target	Actual
# of people reached with community-based epidemic prevention and control activities	204,821	24,262
# of volunteers trained by the NS on the Plague	200	80
# of volunteers trained in Contact Tracing and community-based surveillance	200	80
# of volunteers trained in social mobilization and communication	200	80
# of information Education Communication materials for health promotion procured and distributed	2,400	2,400
# of mass awareness campaigns on the plague conducted	28	33
# Dissemination of key messages through broadcasts and radio	800	801
Community Engagement and Accountability evaluation to inform the development of the Social Mobilisation Strategy	1	0
Development of a communication strategy for the prevention and control of the Plague	1	1

Procurement and prepositioning of PPEs and antibiotics for volunteers and NS staff	200	0
# of villages reached with clean-up campaigns	28	33
Narrative description of achievements		
<p>The NS was able to reach 33 villages with messaging and information on the plague against a target of 28. The villages were identified across 3 islands of Ngazidja.</p> <p>The IFRC provided the training materials which were being used in Madagascar and the RDRT supported the NS in adapting these materials in Comoros. The RDRT deployed from Guinea with experience gained from the Ebola response facilitated the trainings together with NS and MoH staff.</p> <p>While the initial plan of action intended to train and deploy 200 volunteers, this target was revised downwards to 80 following the downgrading of the risk of the Plague becoming a regional outbreak. The volunteers were distributed as follows; 30 on Ngazidja island, 30 on Anjouan and 20 on Maholi island.</p> <p>The NS successfully developed a communication strategy for the Plague response. The strategy was developed with support from a public health specialist and the document was approved through a validation workshop which was attended by CRCo, French Red Cross, WHO, MoH and University of Comoros amongst others. The validation workshop enabled stakeholders to also contribute to the improvement of the strategy.</p> <p>Community awareness campaigns conducted by the 80 trained volunteers focused on good sanitation and hygiene practices including rodent control. Each volunteer worked 2 days a week and the NS organized 2 mass sensitization campaigns per month over 2 months. The volunteers reached 24,262 people through household visits and mass sensitization campaigns. Thus, 3,816 households (21,682 people) were visited by CRCo volunteers and 43 mass sensitization campaigns reaching 2,590 people were conducted.</p> <p>While the operation had targeted to reach 204,821 people, the downgrading of the risk of the Plague being a regional outbreak the NS guided by the IFRC revised the number of volunteers to deploy downward. A recommendation was also made to limit the dissemination of information on the Plague as this could potentially result in panic and misdiagnosis given that symptoms of the Plague are similar to those of a common cold.</p> <p>44 clean-up campaigns were conducted across 33 villages with a focus on vector control. The activities included community clean-ups and waste management. The clean-up exercises also saw CRCo volunteers doing awareness sessions on good hygiene and sanitation.</p> <p>A total 801 broadcasts in day and night slots were done across the 3 islands on 3 different radio stations. The messaging was in both French and the local language. The messaging focused on prevention and symptoms of the Plague. Through the radio broadcasts, CRCo aimed at reaching the entire population of Comoros as well as other people traveling through the Comoros Islands with access to radio.</p> <p>2,000 fliers and 400 posters were produced and distributed across the 3 islands with priority locations for distributions being ports, airports and public places. CRCo in consultation with MoH, adapted the IEC materials designed with WHO, CRCo and MoH. The IEC materials had CRCo and IFRC logos.</p>		
Challenges		
<p>The change in the risk of the Plague outbreak being a Regional outbreak resulted in changes in the implementation plan including stopping the procurement of Personal Protective Equipment (PPEs) and implementing a Community Engagement and Accountability evaluation. The NS had already made commitments to the MoH and government which raised expectations.</p> <p>The NS negotiated with the IFRC to maintain most of the planned activities as dropping most of the planned activities would have compromised the relationship between the NS and its stakeholders.</p> <p>The National Society in its data collection and reporting did not disaggregate numbers of people reached and assisted by gender.</p>		

Lessons Learned
The DREF funding enabled the NS to support the MoH whose capacity i.e. financial and technical to respond to the Plague was limited. In future operation it is essential to support the National Societies on the importance of collecting and disaggregating numbers of people reached by gender.

Influence others as leading strategic partner		
Indicators:	Target	Actual
Lessons Learnt workshop conducted	1	0
# of RDRT (Health in Emergencies profile) deployed	1	1
Narrative description of achievements		
The lessons learnt workshop was not conducted due to the changes in context which did not require this activity to be conducted. The lessons from the Madagascar plague response will however be shared with CRCo.		

D. THE BUDGET

The overall budget for this DREF operation was CHF 67,937, of which CHF 50,339 were utilized. A balance of CHF 17,598 will be returned to the DREF.

Explanation of variances:

“**Transport and vehicle costs**” budget line was overspent because the NS omitted to budget for vehicle running costs as this was integrated in the activity budget lines. However, when reporting these are correctly booked resulting an expenditure of CHF 216.

“**Volunteer Costs**” budget line was overspent by CHF 6,431 against a budget of CHF 300. This is because the NS in developing their budget integrated the volunteer allowances at activity level i.e. in the budget for clean-up campaigns, mass awareness campaigns and volunteer trainings instead of having a separate budget line for volunteer allowances.

Information and Public Relations: The cost of printing IEC materials on the plague was higher than the budget, resulting in an over expenditure of CHF1,924 (18.59%) on this budget line.

Communication: The cost for communication was higher than the budget as the actual costs incurred in the implementation was higher than the budget of CHF 360 resulting in an over-expenditure of CHF 504 (140%). This over expenditure is also a result of the costs incurred in shipping the financial report to the IFRC offices in Kenya.

Financial Charges: The budget did not include the costs related to the transfer of funds from the IFRC to the Comoros Red Crescent Societies; however, these costs were incurred resulting in a CHF 972 expenditure.

Contact information

Reference documents



Click here for:

- Previous Appeals and updates
- Emergency Plan of Action (EPoA)

For further information, specifically related to this operation please contact:

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In the IFRC

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For In-Kind donations and Mobilization table support:

- **Operational Logistics, Procurement and Supply Chain Unit Africa Region,** Rishi Ramrakha, Head of Unit, email: rishi.ramrakha@ifrc.org, phone: +254 733 88 8022

For Performance and Accountability support (planning, monitoring, evaluation and reporting enquiries)

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How we work

All IFRC assistance seeks to adhere to the **Code of Conduct** for the International Red Cross and Red Crescent Movement and Non-Governmental Organizations (NGO's) in Disaster Relief and the **Humanitarian Charter and Minimum Standards in Humanitarian Response (Sphere)** in delivering assistance to the most vulnerable. The IFRC's vision is to inspire, **encourage, facilitate and promote at all times all forms of humanitarian activities** by National Societies, with a view to **preventing and alleviating human suffering**, and thereby contributing to the maintenance and promotion of human dignity and peace in the world.

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The IFRC's work is guided by Strategy 2020 which puts forward three strategic aims:

1. Save lives, protect livelihoods, and strengthen recovery from disaster and crises.
2. Enable healthy and safe living.
3. Promote social inclusion and a culture of non-violence and peace

Disaster Response Financial Report

MDRKM006 - Comores - Plague Preparedness

Timeframe: 18 Oct 17 to 18 Jan 18

Appeal Launch Date: 18 Oct 17

Final Report

Selected Parameters

Reporting Timeframe	2017/10-2018/5	Programme	MDRKM006
Budget Timeframe	2017/10-2018/1	Budget	APPROVED
Split by funding source	Y	Project	*
Subsector:	*		

All figures are in Swiss Francs (CHF)

I. Funding

	Raise humanitarian standards	Grow RC/RC services for vulnerable people	Strengthen RC/RC contribution to development	Heighten influence and support for RC/RC work	Joint working and accountability	TOTAL	Deferred Income
A. Budget		64,937				64,937	
B. Opening Balance							
Income							
Other Income							
DREF Allocations		67,937				67,937	
C4. Other Income		67,937				67,937	
C. Total Income = SUM(C1..C4)		67,937				67,937	
D. Total Funding = B +C		67,937				67,937	

* Funding source data based on information provided by the donor

II. Movement of Funds

	Raise humanitarian standards	Grow RC/RC services for vulnerable people	Strengthen RC/RC contribution to development	Heighten influence and support for RC/RC work	Joint working and accountability	TOTAL	Deferred Income
B. Opening Balance							
C. Income		67,937				67,937	
E. Expenditure		-50,339				-50,339	
F. Closing Balance = (B + C + E)		17,598				17,598	

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Split by funding source	Y	Project	*
Subsector:	*		

All figures are in Swiss Francs (CHF)

III. Expenditure

Account Groups	Budget	Expenditure					TOTAL	Variance
		Raise humanitarian standards	Grow RC/RC services for vulnerable people	Strengthen RC/RC contribution to development	Heighten influence and support for RC/RC work	Joint working and accountability		
	A					B	A - B	
BUDGET (C)			64,937			64,937		
Relief items, Construction, Supplies								
Water, Sanitation & Hygiene	10,360		10,865			10,865	-505	
Medical & First Aid	11,000						11,000	
Total Relief items, Construction, Sup	21,360		10,865			10,865	10,495	
Logistics, Transport & Storage								
Distribution & Monitoring	2,500		2,697			2,697	-197	
Transport & Vehicles Costs			216			216	-216	
Total Logistics, Transport & Storage	2,500		2,913			2,913	-413	
Personnel								
International Staff	9,250		6,640			6,640	2,610	
Volunteers	300		6,731			6,731	-6,431	
Total Personnel	9,550		13,371			13,371	-3,821	
Workshops & Training								
Workshops & Training	13,806		3,923			3,923	9,883	
Total Workshops & Training	13,806		3,923			3,923	9,883	
General Expenditure								
Travel	3,000		2,087			2,087	913	
Information & Public Relations	10,348		12,272			12,272	-1,924	
Office Costs	50						50	
Communications	360		864			864	-504	
Financial Charges			972			972	-972	
Total General Expenditure	13,758		16,195			16,195	-2,437	
Indirect Costs								
Programme & Services Support Recove	3,963		3,072			3,072	891	
Total Indirect Costs	3,963		3,072			3,072	891	
TOTAL EXPENDITURE (D)	64,937		50,339			50,339	14,598	
VARIANCE (C - D)			14,598			14,598		

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Split by funding source	Y	Project	*
Subsector:	*		

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IV. Breakdown by subsector

Business Line / Sub-sector	Budget	Opening Balance	Income	Funding	Expenditure	Closing Balance	Deferred Income
BL2 - Grow RC/RC services for vulnerable people							
Disaster management	64,937		67,937	67,937	50,339	17,598	
Subtotal BL2	64,937		67,937	67,937	50,339	17,598	
GRAND TOTAL	64,937		67,937	67,937	50,339	17,598	