HOSPITALS SAFE FROM DISASTERS: Reduce risk, Protect health facilities, save lives

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MOH
MADAGASCAR
**Madagascar Context**

- **Area (km square):** 592,000
- **North – South:** 1,600 Km
- **East – West:** 570 Km
- **Population:** 19,000,000
- **Urban Population:** 7,000,000
- **Rural Population:** 12,000,000
- **Regions:** 22
- **Districts:** 111
- **I HCCenters:** 2800
- **Referral Hospitals:** 20
- **Specialized & Teaching Hosp:** 6
- **DH I:** 147 / 173 (WHO)
- **IMR:** 88/1000
10 main causes of morbidity

- IRA
- fièvre
- maladies diarrhéiques
- infections cutanées
- affections bucco-dentaires
- infections de l'œil et de ses annexes
- IST
- accidents et traumatismes
- hypertension
- malnutrition
- autres
CLIMATES

d'après Koechlin (1974)
From November 2007 to April 2008
CYCLONES 2007–2008 IN MADAGASCAR
CONSEQUENCES

The Rapid Environmental Assessment did not identify any urgent life threatening environmental impacts. (photo: H. Partow)
# CYCLONES IMPACTS

<table>
<thead>
<tr>
<th>CYCLONES</th>
<th>IMPACT</th>
<th>HEALTH CENTERS</th>
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<tbody>
<tr>
<td></td>
<td>Dead</td>
<td>Injured</td>
</tr>
<tr>
<td>FAME</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>IVAN</td>
<td>93</td>
<td>639</td>
</tr>
<tr>
<td>JOKWE</td>
<td></td>
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<tr>
<td>TOTAL</td>
<td>106</td>
<td>641</td>
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*BNGRC Madagascar Avril 2008*
PROBLEMS AND HEALTH RISKS

- Diarrhoe (polluted water): dysenteria, infantile diarrhoe, ...
- Acute Respiratory Infections
- Vector borne diseases: Malaria, Dengue CHK ...
- Malnutrition
- Dermatosis
- Problems due to geographical access and financial resources for health care
ACTIONS FOR EMERGENCIES RESPONSES

EXECUTIVE SECRETARIAT/BNGRC

- ALL MINISTERIES (MOH...)
- NGO (RED CROSS...)
- International Agencies (WHO...)
HEALTH SECTOR

HEALTH COMMITTEE

Health Subcommittee (WHO/SUCA)

Water & Sanitation Subcommittee (UNICEF/SAGS)

Nutrition Subcommittee (UNICEF/ONN)
MINISTRY OF HEALTH

- DULM
  - SSELME
  - SUCA
  - Autres Pg de lutte
    - DRS/ESM
      - SDS
      - SDS
      - SDS
    - DRS/ESM
    - DRS/ESM

- CSB
- CSB
Identifying high risk areas (according to weather forecast trajectories)
Pre-positioning of drugs and equipment in regions at risk (SUCA/WHO)
Establishing plans ORSEC in districts at risk
Integrated measles campaign, ITN, vitamin A deworming of children (weeks: Mothers – Children)
Evaluations:
- Food Safety:

First Aid:
- Establishment of sites for the victims
- Food Aid (rice and NPP) and tents
- Kitchen utensils
- Drugs and ITNs,
- Equipements for water purification and sanitation
- Airlifts to transport aid


**ACTIONS AFTER CYCLONES**

- Health interventions:
  - Support among affected victims:
    - Completely free;
    - Mobile teams (MOH)
    - Delivering emergency kits (WHO kits)
  - Epidemiological Surveillance:
    - Reactivation of integrated surveillance system diseases and response: emphasis on surveillance of cholera and arboviruses
    - Setting up an early system in the affected areas
    - Setting up a network of sentinel surveillance of arboviruses (with IPM)
ACTIONS
AFTER CYCLONE SEASON

- **Health Interventions:**
  - Provision of medical kits and supplies for reproductive health emergency (UNFPA)
  - Nutrition:
  - Setting up mobile teams of nutrition in the South East (ONN + UNICEF)
  - Screening of malnutrition among children under 5 years
  - Implementation of food aid and nutrition for people in the South East and in the South (WFP°)
**ACTIONS AFTER CYCLONE SEASON**

Water–Sanitation:

- Disinfection of wells: MOH, Ministry of Energy, ...
- *Delivering to households some* materials and products for water purification (UNICEF)
- Training community and health agents (Water, Hygiene and Sanitation (Red Cross))
- Constructions of latrines (CUA, Ministry of Energy…)
- Disinsectisation et distribution of ITNs (MOH)
PARTNERS’ SUPPORTS

- NGO working in Health Sector:
  - Red Cross: Temporary shelters, Care, Water–Sanitation, IEC
  - Médecins du Monde: Mobile Health Teams in Maroantsetra District (Care, évaluation and épidemiological surveillance, BCC)
  - MEDAIR: latrines programme in disaster victims sites, Water and Sanitation
  - PSI: Drinking water programme
  - ADRA: Supervising Health Workers, Prevention of malaria, …
CONSTRAINTS

- Large area of the country and the lack of communication for the affected remote sites
- Problems of communications for delivering aid and for coordination
- Health facilities made of local material (wood...) and located in low sites (always destroyed and flooded)
- Lack of human resources at all levels
PERSPECTIVES

- Improving coordination: operationalization of clusters (health, water, sanitation and nutrition)
- Implementation of the contingency plan
- Improving health information system in a matter of emergency
  - Improving the Disease surveillance system during emergency situation
  - Capacity building of health workers at all levels
- Greater decentralization of the health system (Accountability and capacity building of regions structure)
- Building health facilities according to building codes and standards
THANK YOU

MISAOTRA

TOMPOKO