Medical Response to Haiti Earthquake
Operation Unified Response

*The Quadruple Aim: Working Together, Achieving Success*
CAPT Michele Hancock, Deputy SG, US Southern Command
24 January 2011
1. REPORT DATE  
24 JAN 2011

2. REPORT TYPE

3. DATES COVERED  
00-00-2011 to 00-00-2011

4. TITLE AND SUBTITLE  
Medical Response to Haiti Earthquake: Operation Unified Response

5a. CONTRACT NUMBER

5b. GRANT NUMBER

5c. PROGRAM ELEMENT NUMBER

5d. PROJECT NUMBER

5e. TASK NUMBER

5f. WORK UNIT NUMBER

6. AUTHOR(S)

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
US Southern Command, 9301 NW 3rd St, Doral, FL, 33172

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

10. SPONSOR/MONITOR’S ACRONYM(S)

11. SPONSOR/MONITOR’S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT  
Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES  
presented at the 2011 Military Health System Conference, January 24-27, National Harbor, Maryland

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:  

<table>
<thead>
<tr>
<th>a. REPORT</th>
<th>b. ABSTRACT</th>
<th>c. THIS PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>unclassified</td>
<td>unclassified</td>
<td>unclassified</td>
</tr>
</tbody>
</table>

17. LIMITATION OF ABSTRACT  
Same as Report (SAR)

18. NUMBER OF PAGES  
29

19a. NAME OF RESPONSIBLE PERSON

Standard Form 298 (Rev. 8-98)  
Prescribed by ANSI Std Z39-18
Agenda

Operation UNIFIED RESPONSE

• Background Info
• Mission
• Phases of Support
• Deployment Timeline
• Medical Missions
• International Response
• Lessons Learned
Background Info

- Population: 9,035,536 (approximately 2 million in and around Port-Au-Prince)
- NGOs on the ground for many years, ~3000 in country

Unemployment rate: 65-70%
-- 80% population living under poverty line
-- 54% in abject poverty

- Military: Only small Coast Guard (no other forces)
A Magnitude 7.0 earthquake struck Haiti at 4:53 pm, Tues, Jan 12, 2010

- 230,000 Deaths*
- 197,000 Injured
- 1.1M Displaced People
- 3,000,000 Affected People
- 60% of government infrastructure destroyed
- 14 of 16 Ministry Headquarters destroyed
Mission Overview

**Mission**: JTF-H conducts humanitarian assistance/ disaster relief (HA/DR) operations to support USG efforts in Haiti to mitigate near-term human suffering and accelerate relief efforts to facilitate transition to Government of Haiti, United Nations, and USAID.
Phase I – Emergency Response

- Immediate Life Saving
  - Search and Rescue
  - Care for AMCITS
  - Hospital Assessments
  - Medical CONOPS
  - RSO&I of Medical Personnel
  - Medevacs
Phase II – Relief

Operation UNIFIED RESPONSE

- Mitigate Suffering and Meet Basic Needs
  - Specialized surgical care
  - Med Log and blood support
  - Patient transfers off ship
  - Medevacs
  - Troop FHP
Deployment Timeline (January)

**Magnitude 7.0 Earthquake vic. Port au Prince**

- First evacuation of Haitian nationals
- First AMC Executed Evacuation
- EMEDS+10 Arrives
- Evacuation of Haitians Suspended
- Evacuation of Haitians Suspended
- 6.1 Aftershock
- First HHS Personnel Arrive
- First evacuation of Haitian nationals
- NASSAU ARG Arrives
- MASF & AELT Arrive
- AF CCAT & PM-SAT Operational

**Deployment Timeline (January)**

- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25
- 26
- 27
- 28
- 29
- 30
- 31
- 1
- 2
- 3
- 4
- 5

- AFSOC Arrives
- SJFHQ Arrives
- VINSON Arrives
- B CO, 1/73 CAV (82 ABN) Arrives
- JTF-B MEDEL Operational
- COMFORT Arrives
- BATAAN ARG Arrives
- First AMC Executed Evacuation
- EMEDS+10 Arrives
Deployment Timeline (February)

- Decision Made NOT to Employ EMF-150
- AE Review Board Established
- USS VINSON Departs
- 153rd Blood Support Det Arrives
- 43rd Veterinary Det Arrives
- 56th MMB Arrives
- Definitive Care Components of NDMS Activated
- Evacuation of Haitians Resumes
- Commercial Flights Resume From PaP
- COMFORT Surg Augments Redeploy
Deployment Timeline (March)

1. USTC AE Enablers Redeploy
2. EMEDS + 10 Redeploys
3. COMFORT Redeploys
4. JTF-H Conducts RIP w/ARSOUMTH
5. DHHS Stands Down FCCs
6. Final DHHS Treatment Asset Redeploys
7. NDMS Officially Stood Down
HAITI EARTHQUAKE
230,000 killed
196,595 injured
1,200,000 to 1,290,000 displaced
3,000,000 affected

*All figures are approximate. Commune population figures are as of 2003.

SOURCES: OCHA/GoH 02.22.10

PORT-AU-PRINCE*
30-40% destroyed
Commune population: 704,776
Metro Population estimate: 2,000,000

RESSIER*
40-50% destroyed
Commune population: 25,947

CARREFOUR*
40-50% destroyed
Commune population: 373,916

PETIT GOAVE*
15% destroyed
Commune population: 117,504

LÉOGÂNE*
80-90% destroyed
Commune population: 134,190

JACMEL*
50-60% destroyed
Commune population: 137,966

SOURCES:
OCHA/GoH 02.22.10

* Population movements indicated include only individuals utilizing GoH provided transportation and do not include people leaving Port-au-Prince utilizing private means of transport.

EARTHQUAKE-affected Areas and Population Movement in Haiti

The Modified Mercalli (MMI) Intensity Scale*

POPULATION MOVEMENT*
Source: OCHA 02.22.10
* Population movements indicated include only individuals utilizing GoH provided transportation and do not include people leaving Port-au-Prince utilizing private means of transport.
Afloat Based Medical Support

Operation UNIFIED RESPONSE
Maritime Laydown

Operation UNIFIED RESPONSE

VINSON (CVN)
USNS COMFORT (T-AH)
NORMANDY (CG)
BUNKER HILL (CG)
HIGGINS (DDG)
UNDERWOOD (FFG)

NASSAU ARG with 24 MEU:
NASSAU (LHD)
MESA VERDE (LPD)
ASHLAND (LSD)

BATAAN ARG with 22 MEU:
BATAAN (LHD)
FORT MCHENRY (LSD)
CARTER HALL (LSD)
GUNSTON HALL (LSD)
**COMFORT Timeline**

**Operation UNIFIED RESPONSE**

---

**Phase I**
- Max Patient Capacity: 411
- 1002 total admissions (872 patients, 130 escorts)
- 931 surgical procedures

**Key Events**
- **12 Jan:** Haiti hit by earthquake
- **15 Jan:** MTF FOS crew, initial NGO embark
- **16 Jan:** COM deploys
- **19 Jan:** First HN patient aboard
- **20 Jan:** CDS40 Embark
- **27 Feb:** Last HN patient discharge
- **28 Jan:** Peak census: 411
- **4 Feb:** NGO surgical augment team aboard
- **26 Feb:** Last HN surgical procedure
- **10 Mar:** COM redeploy
Land Based Medical Support
JTF-H MEDICAL COP
Phase I: o/a 20JAN – 05FEB010

- BCT/BN HQ
- Distribution Hubs
- Haitian Hosp
- Hosp
- Embassy
- LEVEL II

1-73 CAV LV I
YF84005173
68Ws x 23 each

Haitian Hosp
Embassy

1-325 AIR
YF86175832
68Ws x 34 each

2BSTB
YF89575619
Tailgate Med
68Ws x 10 each

LEVEL II
YF84575619
68Ws x 44 each

MASF/SPEARR/AE
LT/AFSOC SOST(-)YF85175605

JTF HQ
YF89575451
- AFSOC SOST

FST/Colombian Surg/Mexican Surg
YF75485145
EMEDS Response

Operation UNIFIED RESPONSE

• Served as “Gate keeper”
• 10+ beds and 1 OR
• 300 patients and 200 escorts moved
• 125 inpatients rec’vd care

• 12 day trips
• Assisted 3 NGO’s
• 1500 patients seen
• 4 tons medical supplies
Medical Logistics Support

Support to PROMESS Warehouse

- Logistics Advisory Team
- Re-organized warehouse
- Provided inventory mgmt
- Teams at port to organize donations
- Forklift support
Patient Movement Missions

Operation UNIFIED RESPONSE

- Ground ambulance
- Rotary wing medevac
- Small boat medevac
- Evac to GTMO and CONUS
Patient Movement – CONUS

AE Staging
MacDill, AFB

GITMO
Naval Hospital

Port-au-Prince
APOE

NDMS Started
NDMS Ended
Contingency PM Report

Airlift Sourcing

- Other
- DoS
- AMC
- AFSOC

Patient Movement = Total 353

ISSUES:
1. Supporting DoD Haiti Patient Movement Requirements
2. Supporting DoD Chilean Patient Movement Requirements

A/O 1200Z14APR10
## Patient Outflow – within Haiti

<table>
<thead>
<tr>
<th>Organization</th>
<th>Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children of Promise**</td>
<td>1</td>
</tr>
<tr>
<td>Sacred Heart**</td>
<td>45</td>
</tr>
<tr>
<td>Partners in Health</td>
<td>14</td>
</tr>
<tr>
<td>Real Hope for Haiti</td>
<td>10</td>
</tr>
<tr>
<td>Love a Child</td>
<td>90</td>
</tr>
<tr>
<td>Killick</td>
<td>9</td>
</tr>
<tr>
<td>Terminal Varreux</td>
<td>360</td>
</tr>
<tr>
<td>St. Damien’s Children’s Hospital**</td>
<td>30</td>
</tr>
<tr>
<td>Heart Line</td>
<td>12</td>
</tr>
<tr>
<td>Angel Missions</td>
<td>10</td>
</tr>
<tr>
<td>Gheskio Hospital</td>
<td>1</td>
</tr>
<tr>
<td>PIH / Double Harvest**</td>
<td>4</td>
</tr>
<tr>
<td>Doctors without Borders</td>
<td>3</td>
</tr>
<tr>
<td>Canadian Field Hospital</td>
<td>3</td>
</tr>
<tr>
<td>St. Bonaface**</td>
<td>25</td>
</tr>
<tr>
<td>Aerovac</td>
<td>77</td>
</tr>
</tbody>
</table>

GoH / UN approved shore-based medical network provided placement of COMFORT patients for post-operative care.
Medical Forces Afloat

- SPS CASTILLA
- ITN CAVOUR
- FRS SIROCCO
- ARM HUASTECO
- ARM TARRASCO
- ARM PAPALOAPAN
- ARC BUENAVENTURA
- ARC CARTAGENA DE INDIAS

Medical Forces Ashore

Canadian Field Hospital
China - Medical Rescue Team
Chile - Portable Hospitals
Japan - Medical team
Jordan - Field Hospital
Israel - Field Hospital
Spain - Medical Team

Russia - Mobile Hospital
Brazil - Field Hospital
Turkey - Field Hospital
France - Field Hospital
Venezuela - Medical Team
Cuba - Medical Team
Italy - Medical Team
AAR: What we did well

Operation UNIFIED RESPONSE

- **Interagency Coordination** - Pre-crisis professional relationships and routine interagency coordination proved to be essential during the response.

- **Collaboration and Synchronization (Strategic)** - The USSC SG daily TELECON provided vital situational awareness, identified critical issues, and assisted in assigning responsibility for actions.
AAR: What we did well

**Operation UNIFIED RESPONSE**

- **Collaboration and Synchronization (Operational)**
  USAID sponsored daily USG health meetings to pass information from UN Health Cluster and prioritize USG medical response.

- **Operational Environmental Risk Surveillance.**
  Forward Deployed Prev Med Unit (FDPMU) arrived early in deployment and was fully mission capable.
AAR: What Needed Improvement

Operation UNIFIED RESPONSE

• Delay in USG and DoD Policy Concerning Evacuation of Haitian and Foreign Nationals

• Delay in Activation of NDMS Definitive Care Component and Non-Activation of NDMS Patient Movement (PM) Component

• Delay in establishing Medical ROE
AAR: What Needed Improvement

- No designated medical rep on OFDA Disaster Assistance Response Team (DART)

- COMFORT not initially configured for FDR mission

- No Interagency Common Operating Picture

- JMEWS not used
Final Words of Wisdom

- Clearly define mission of DoD medical forces
- Maintain close coordination with OFDA
- Partner with NGO’s and international community
- Collaborate, don’t work in a vacuum
- Develop transition criteria and decision points
Unity of Effort At All Levels