



Fighting Ebola at the Source: Destination Liberia

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Liberia



- Population: ~4 million people
- Capitol City: Monrovia
pop. ~ 1 million
- Land area: 43,000 mi² ~ size of Tennessee
- Few paved roads
- Health spending as percentage of GDP: Rank 1, US Ranks 3rd
- GDP Ranking: 170/183
- \$88/person vs. US \$9,000/person
- Weather: Two Seasons, Hot and Humid and Wet, Hot and Humid

Liberia



Health

- Average life expectancy: Males 56.56/Females: 59.9
- **Degree of risk of Infectious disease: very high** (food and waterborne bacterial and protozoal diarrhea, hepatitis A, and typhoid fever, malaria, dengue fever, and yellow fever, schistosomiasis, Lassa fever, rabies)
- Clean water and sanitation issues

Medical

- Medical Infrastructure largely destroyed during two civil wars
- 56 Doctors - 1 per 76,000 people
(Missouri: 254 per 100,000 people)
- Reliant on NGOs and International community for basic medical care



The Strategy



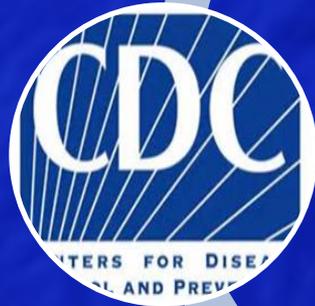
“Ebola epidemic in W. Africa and the humanitarian crisis there is a top national security priority for the United States”

- Predicated on four key goals:
 1. Controlling the epidemic at its source in West Africa;
 2. Mitigating second-order impacts, including blunting the economic, social, and political tolls in the region;
 3. Engaging and coordinating with a broader global audience; and
 4. Fortifying global health security infrastructure in the region and beyond.

Overall USG Response in partnership with Gov't of Liberia (GoL)

United Nations
Mission for
Emergency Ebola
Response (UNMEER)

DOD Operation
United Assistance



Technical Assistance,
Contact Tracing, Lab
Oversight, Training



Commissioned Corps
Ebola Response

Chief of Mission/USAID

- Overall In-Charge of USG Mission and “mission” – the Ambassador
- USAID has enduring presence
- OFDA DART (USAID) has coordination/control from USG Interagency Response and is funding agent.....think FEMA

CDC Tasks

- Provide Subject Matter Expertise to MoH
- Provide Training
- Contact Tracing
- Epidemiology Support
- Laboratory Support

DoD Tasks

- Build Ebola Treatment Units (ETU) - 15
- Sustain Ebola Treatment Units
- Train Health Care Workers (1500)
 - National Police Training Academy/Mobile Teams
- Laboratories (4-5 day down to 3-4 hours)
- Protect the Force
- Build and Support 25-bed Ebola Hospital

USPHS Mission Specificity

The USPHS Commissioned Corps will be the only U.S. government asset in West Africa providing direct patient care in 25-bed Ebola hospital.



How it unfolded for PHS



- CDC begins to respond (Dec 13 – May 14)
- USAID requests additional HHS participation in coordination effort. (June 2014)
- Proposal for USPHS to serve in multiple roles including direct patient care. Presented to National Security Council. (July/August 2014)
- Activation and Deployment memo of signed (Sep 2014)
- Includes broad language for multiple Corps roles.
- White House Principals Committee Conclusions: (Sep 2014)

HHS with USAID support, will deploy USPHS Commissioned Corps to Liberia to staff the DoD-provided 25-bed medical unit for Ebola care.

Potential Challenges

- USPHS has no “units” to send/owns nothing
- DoD facility staffed by Corps with a dangerous pathogen, in international environment with force health threats.
- Funding streams differ.
- High risk and high visibility
- In-country operational realities with communications , movement and logistics.
- Expectation management (politics v operations)

Interagency Planning

Within Dept of Health and Human Services and OGA

- Eligibility
- Liability (SOFA, Bilats) for provision of direct care in Liberia
- Level of care

With USAID

- Overall roles and coordination
- Fiscal resources

With DoD

- Deployment requirements
 - Force Protection, Life-support, Air Mobilization
- C2 integration

With CDC

- Training requirements and in-country epidemiology

With International Partners

- Additional in-country “hot-zone” training

Monrovia Medical Unit

Truly a Joint Effort

- Air Force Hospital
- Built by Navy Sea Bees
- Supported by the Army
- Run by USPHS
Commissioned Corps



Monrovia Medical Unit Hospital is available to health care workers in the fight against Ebola in Liberia

Most advanced Ebola Care in West Africa

Lab: Blood Analytics

Pharmaceuticals

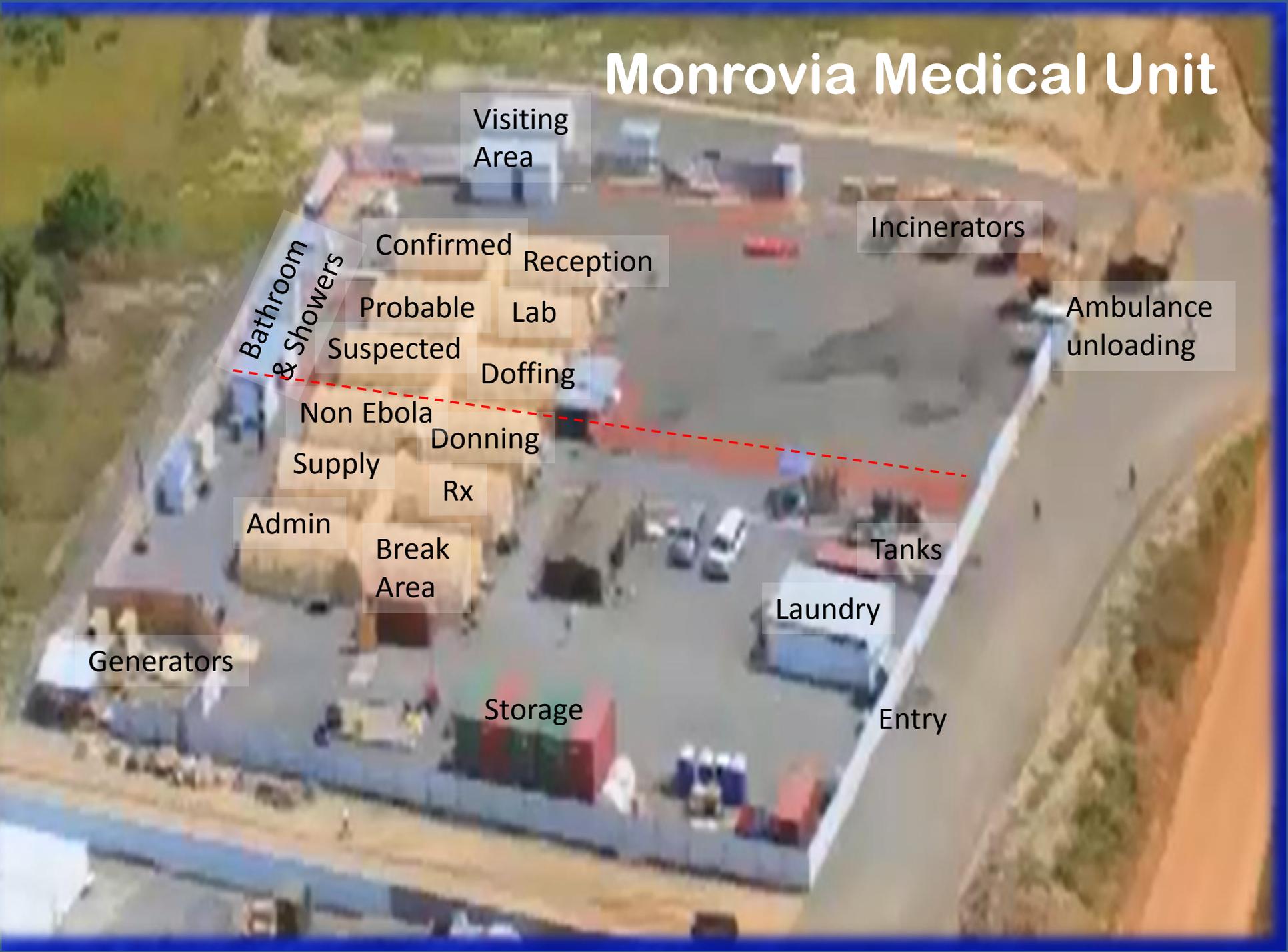
Blood/Plasma



Monrovia Medical Unit



Monrovia Medical Unit



Visiting Area

Incinerators

Bathroom & Showers

Confirmed

Reception

Probable

Lab

Ambulance unloading

Suspected

Doffing

Non Ebola

Donning

Supply

Rx

Admin

Break Area

Tanks

Laundry

Generators

Storage

Entry

LSA – Life Support Area



Contractor Housing

Contractor Offices

MWR

Conf. Rm

Gym

Laundry

Showers

Chow Hall

Storage

Tank Farm & Generators

Bathrooms

Sleeping Quarters

Admin Tent



Supply Section



Patient Wards



Water/Chlorine Water Mix

- 3 Flavors: Plain Water, 0.05% and 0.5%



Patient Intake



Waste Incinerators

Wood Fired. NGO Partner Operated.



Patient Showers and Latrines



Family Visiting Area



Life Support Area



Our first two HCWs discharged



Today I am Healed;
Tomorrow I Return to Heal Others

Time and Distance

Logistics O & M Engineering



Transition = Risk

- Teams swapping out
- Army/Contractor Transition



