



# Through The Eye Of The Storm: Lessons from the 2017 Atlantic Hurricane Season

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USHHS DMAT CA-6





# Disclosure

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This presentation is based on my experiences and do not represent the views or policy of the U.S. Department of Health and Human Services and the Federal Government.

**A moment of silence in honor of the victims of  
the tragic events of 2017**

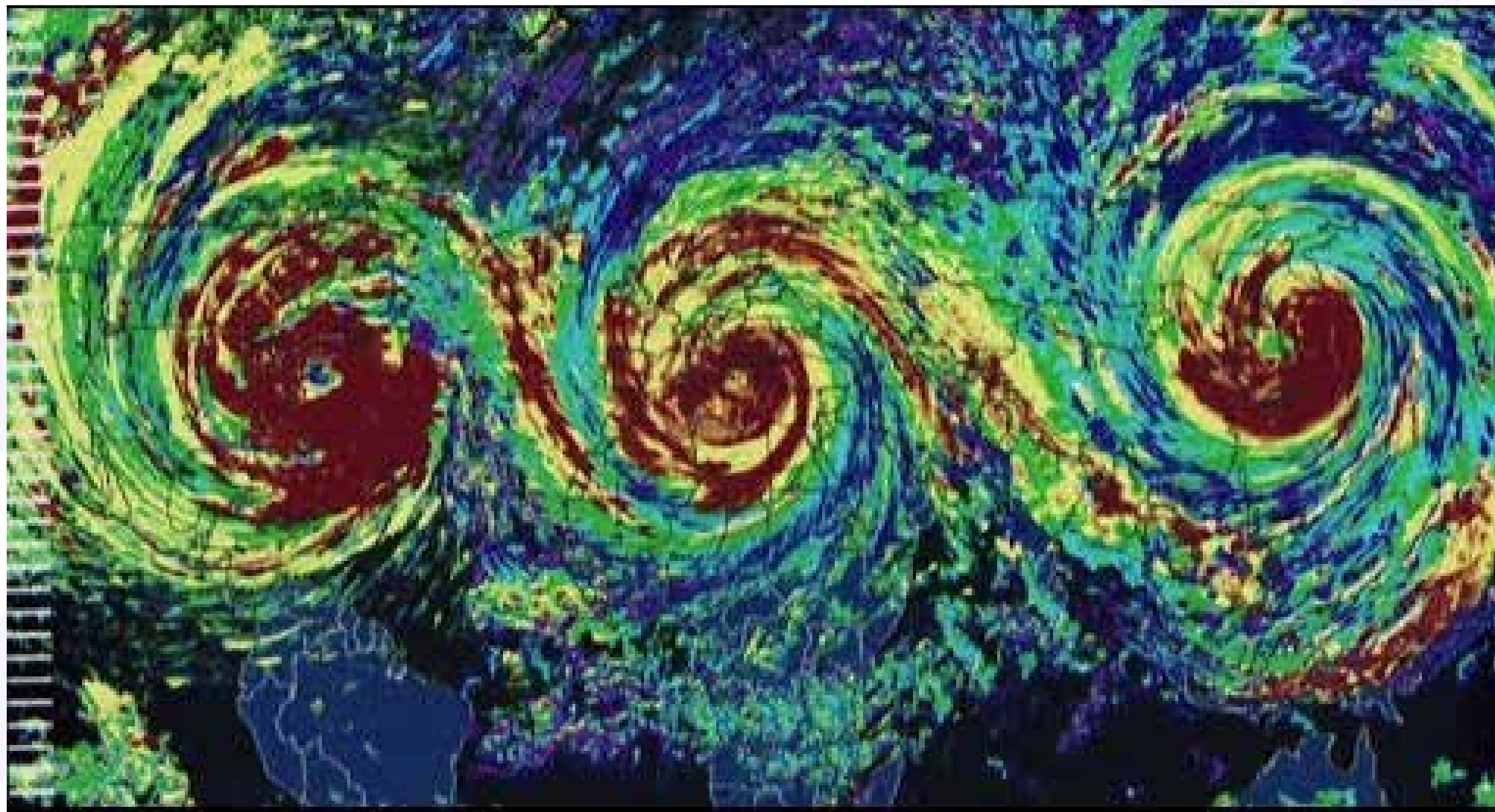


THANK YOU





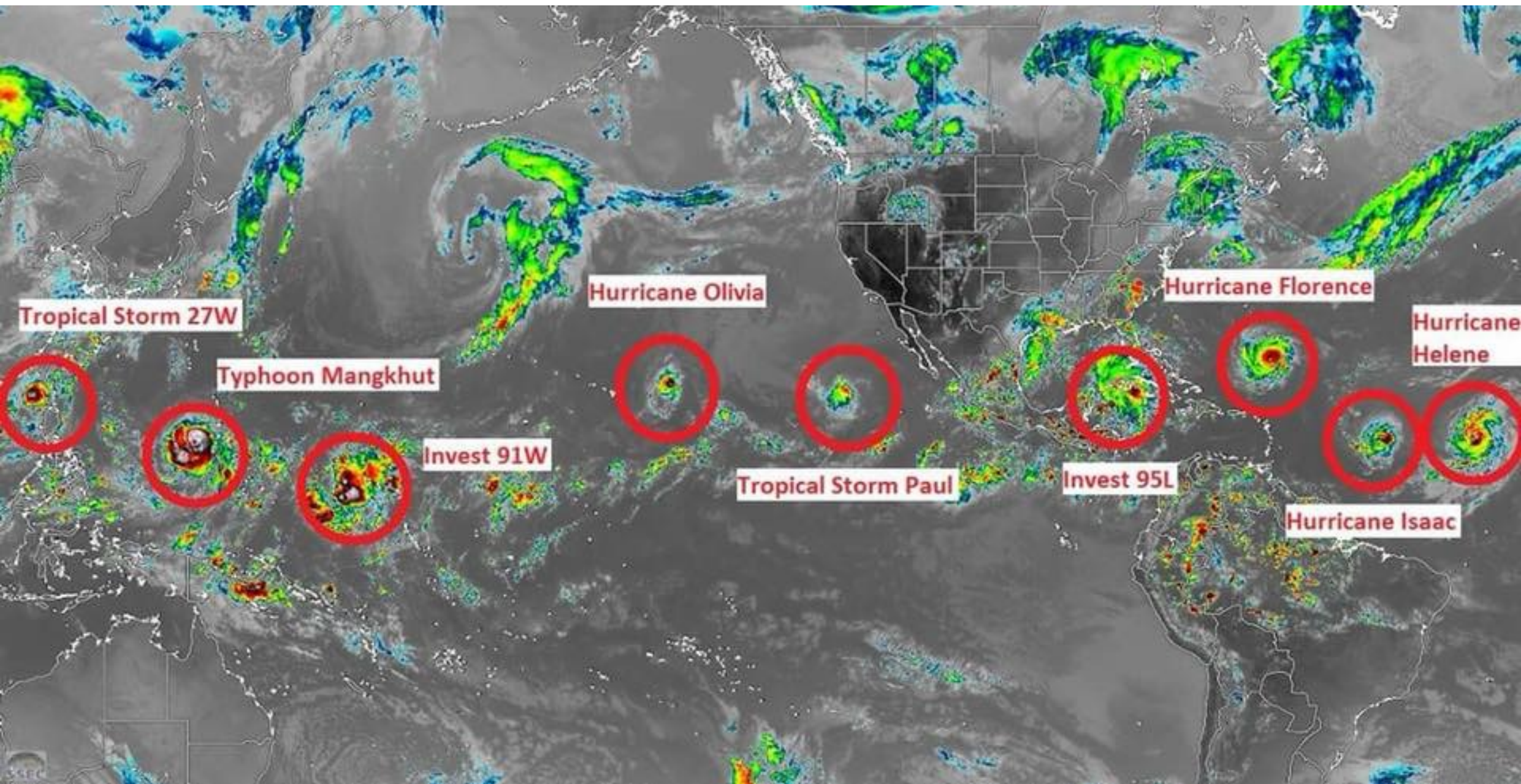
# The Day After Tomorrow













# What is NDMS

National Disaster Medical System (NDMS)



A Nationwide Medical Response System to:

- Supplement state and local medical resources during disasters or major emergencies
- Provide backup medical support to the military/ VA medical care systems during an overseas conventional conflict

*A public / private sector partnership*

*HHS DHS DOD VA*

*Partner Hospitals*





# Major Components of NDMS

## Response Teams

Incident Response Coordination Team  
Disaster Medical Assistance Team  
Trauma & Critical Care Team  
Logistic Response Assistance Team  
Disaster Mortuary Operational Response Teams  
Victim Information Center Team  
Social Access Team  
National Veterinary Response Team

## Patient Movement

DoD Aeromedical  
Evacuation  
Primarily Fixed Wing  
Primary Reception Area  
(PRA)



## Definitive Care

DoD/VA  
Federal Coordinating  
Centers  
NDMS Partner Hospitals

# Context

- Hurricane Harvey makes landfall Aug. 25
- Over 1,000 HHS personnel deployed
- CA-6 backfilled to CA-4





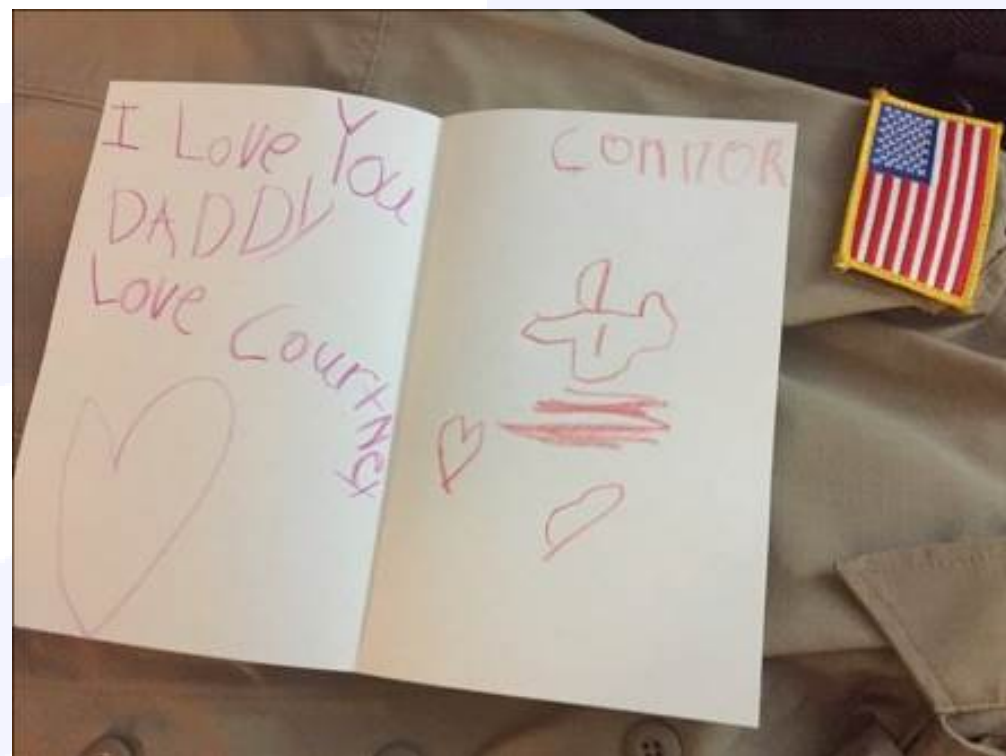


# August 29<sup>th</sup>, 2017

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- DMAT CA-6 is placed on Alert Status
  - Deployment possible within 8-12 hours
  - Continuous monitoring
  - Inform your employer
  - Ensure personal gear is ready to go
  - Prepare family and home matter
- At this point more than half of the deployable response teams are in committed to TX and other impacted areas

# Alert Status: Aug. 29-Sept. 3







# Sunday September 3, 2017

Newark, CA

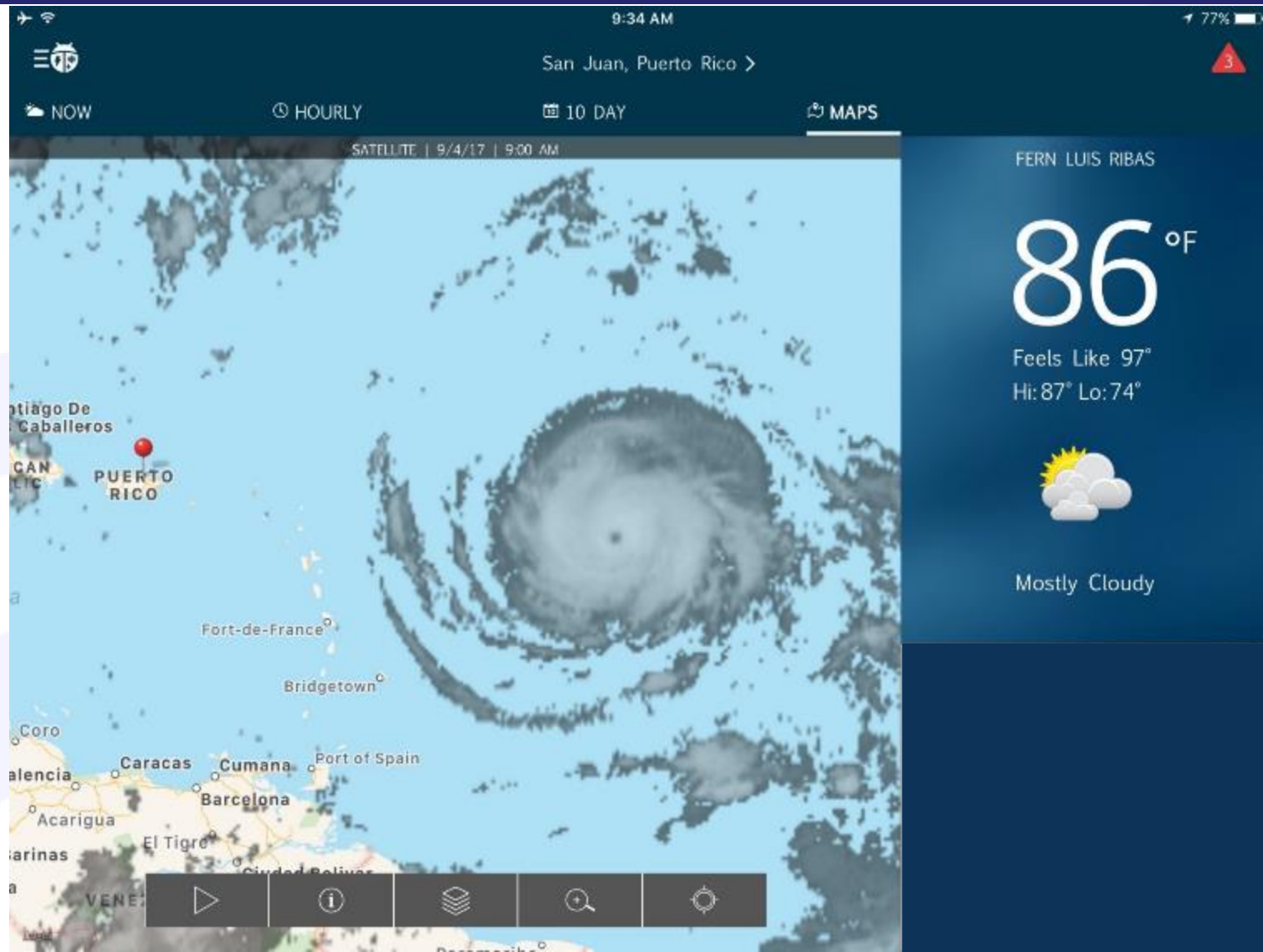
Alerts Heat Advisory - Valid from Sep 3 3:33am PDT Until Sep 3 9:00pm PDT

Santiago De Los Caballeros  
DOMINICAN REPUBLIC  
PUERTO RICO  
Sea  
Fort-de-France  
Bridgetown  
Fijo  
Coro  
Caracas  
Cumana  
Port of Spain  
Valencia  
Maracay  
Barcelona

SATELLITE 7:45 AM PDT

Past Future 2x

# Monday September 4, 2017

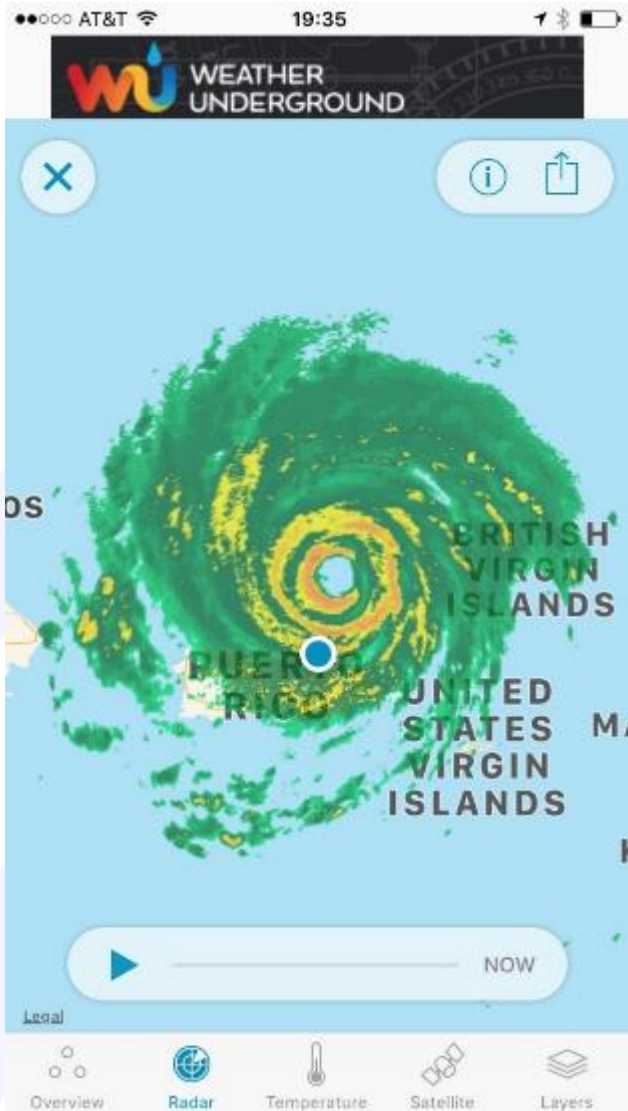




# Shelter In Place – Hurricane Irma



# San Juan Puerto Rico





# United States Virgin Islands







# Impacts of Hurricane Irma





# Critical Infrastructure







ROY LESTER SCHNEIDER HOSPITAL





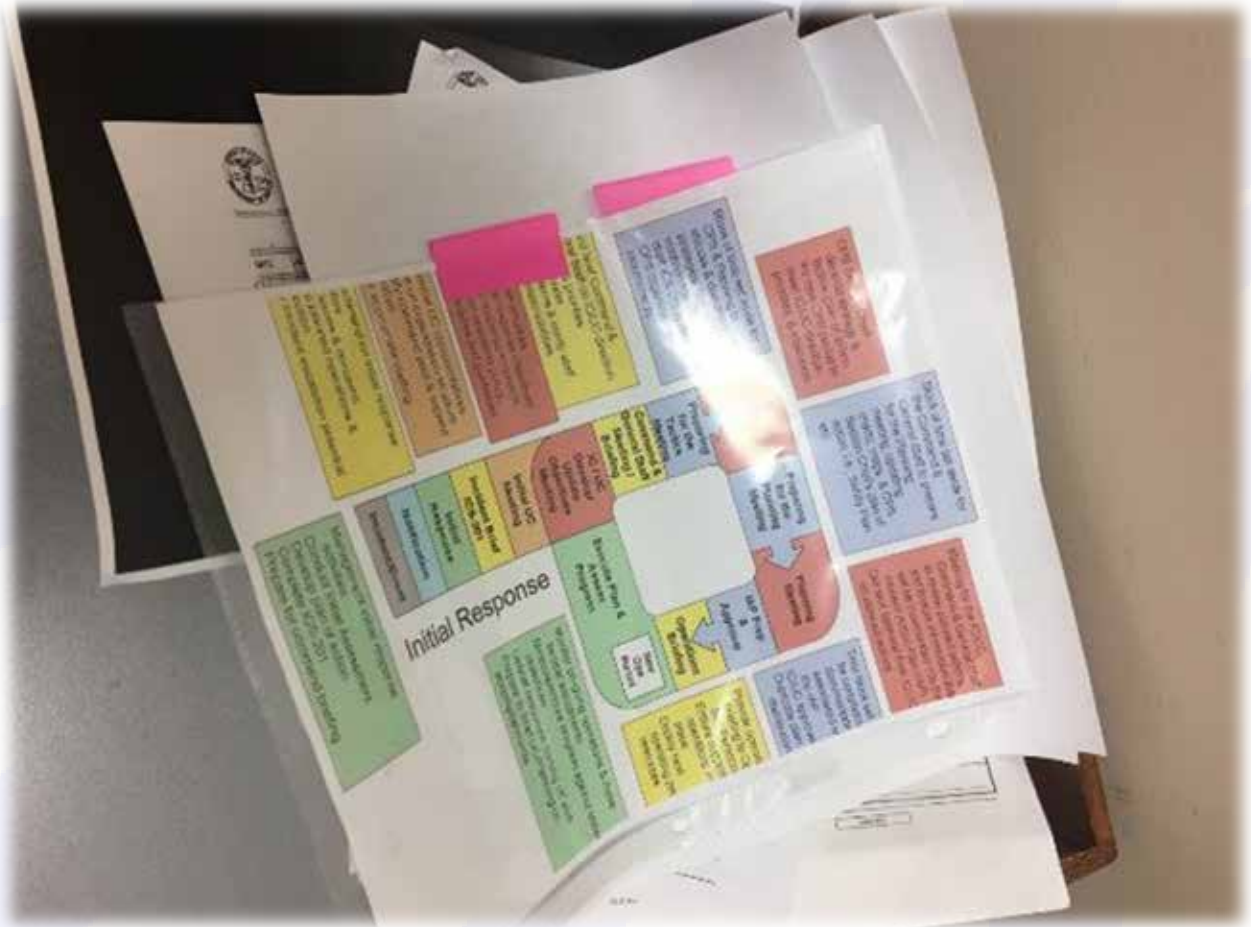
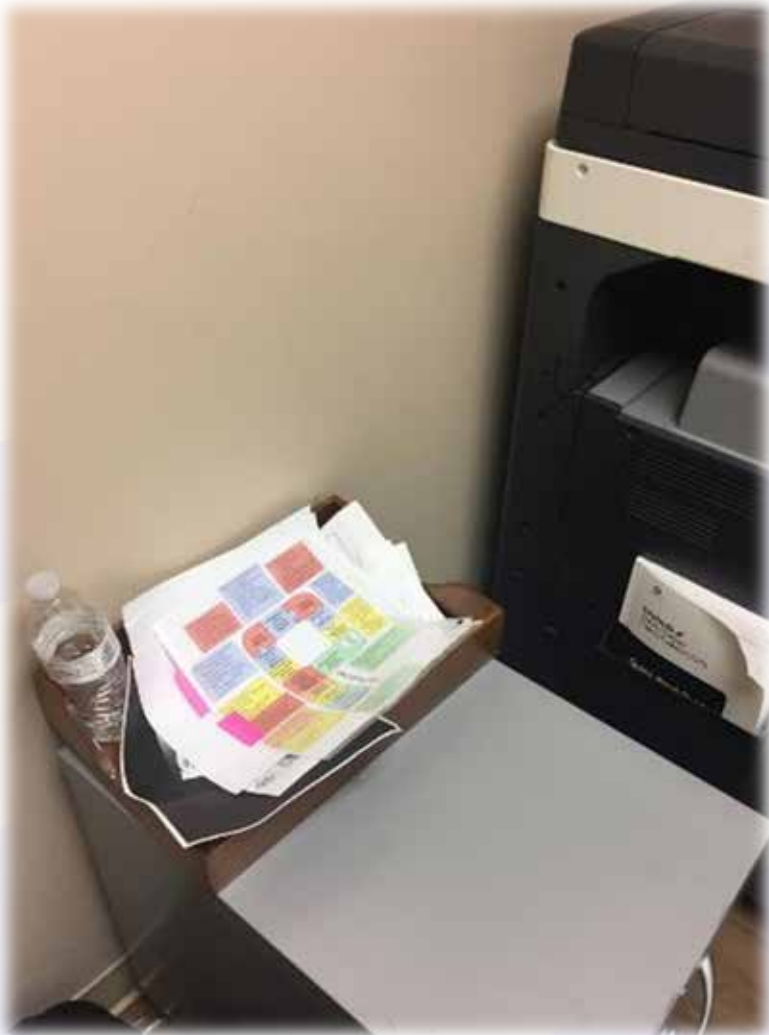




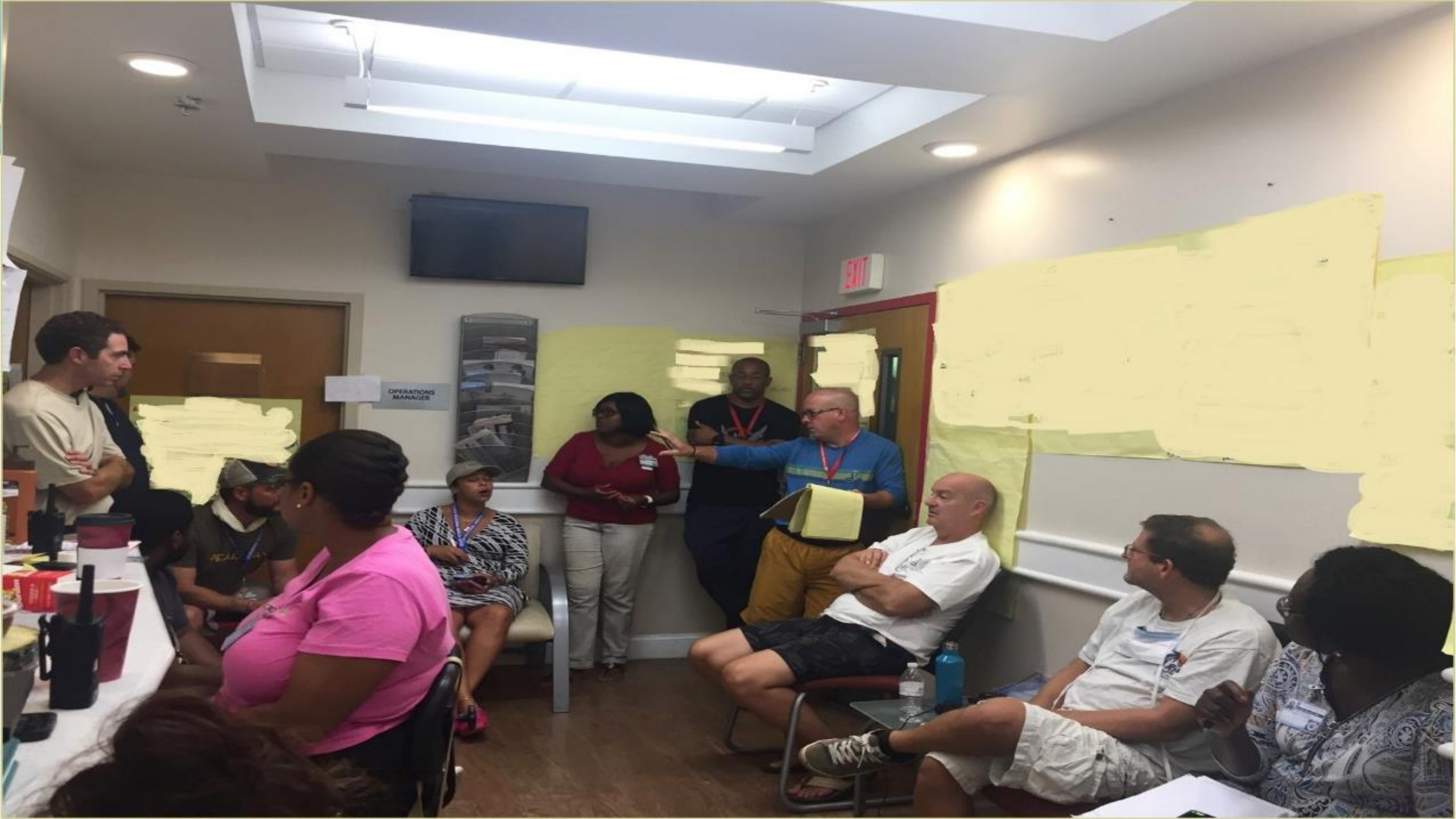




# Remember That You Have A Plan







OPERATIONS  
MANAGER

EXIT



# Priorities

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- Augment Emergency Care
- Evacuate Critical Patients
- Identify, Locate and Evacuate Medically Fragile
- Build a DMAT Base of Operations



# Emergency Care





# Emergency Care (cont.)





# Patient Evacuation





# Patient Evacuation (cont.)



# Medically Fragile

- Dialysis
- Chemo
- Other (e.g. specialty medication needs)





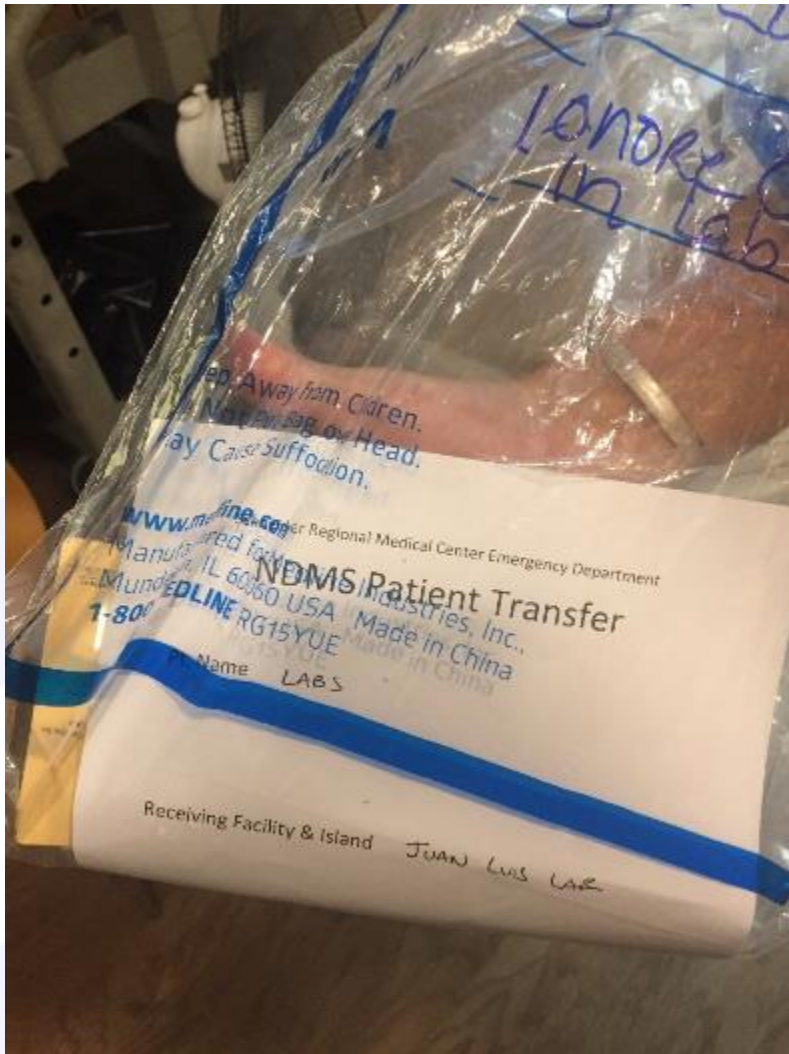
# Medically Fragile (cont.)



# Newborn Screening Labs

## Chain of Custody

- Lab Draw
- DMAT
- Ground Ambulance to Airport
- Air Ambulance
- Lab Courier
- Arrived at Lab







# Base of Operations









# Base of Operations



# Base of Operations (cont.)







# 602<sup>nd</sup> Area Support Medical Company







# Base of Operations





# Hurricane Maria

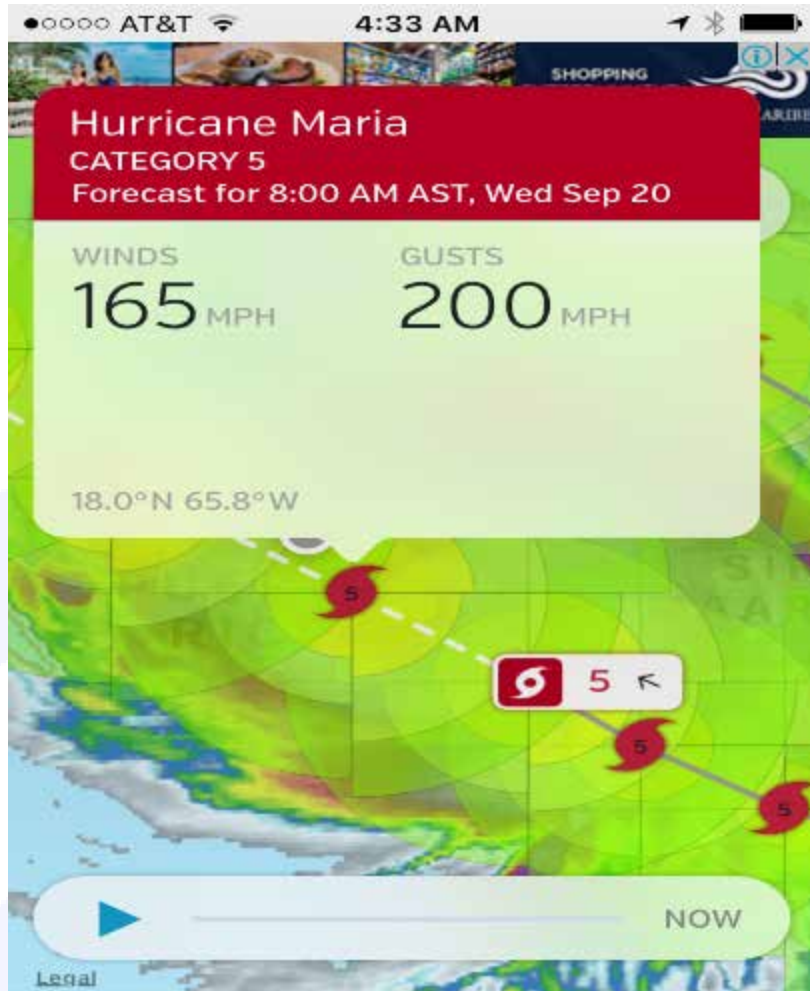


# Dialysis Evacuations





# Shelter In Place – Hurricane Maria





# Rapid Hospital Assessment







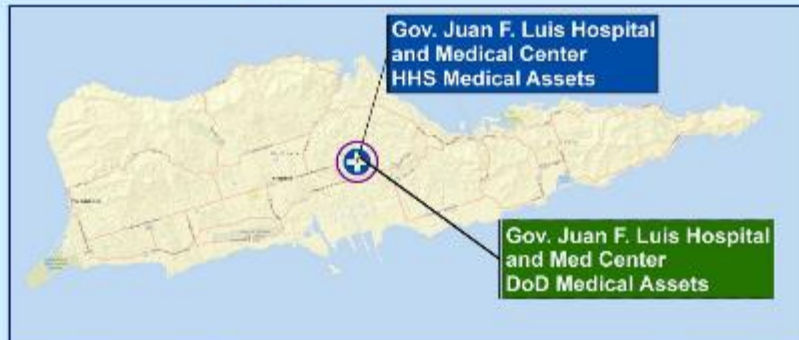
# Centro Medico Base of Operations







USNS COMFORT



Medical Surge	VA Facilities
○ Primary	○ VA Other Outpatient Services
○ Secondary	
○ Tertiary	
Federal Medical Response	DoD Medical Assets
■ Tier 1 Hospital	▲ DoD Medical Assets
■ Tier 2 Hospitals	
■ Tier 3 Hospitals	
USVI Medical Missions	
⊕ USVI Medical Mission	

The USNS Comfort delivers medical care and logistics in support of federal relief efforts. The Comfort will be part of the overall medical support plan and will conduct its mission in seven locations as detailed by the large numbers on the map.  
\*Phase 1, transit to Puerto Rico, is complete.





# Challenges





# Transportation









# Food







# Food Rationing

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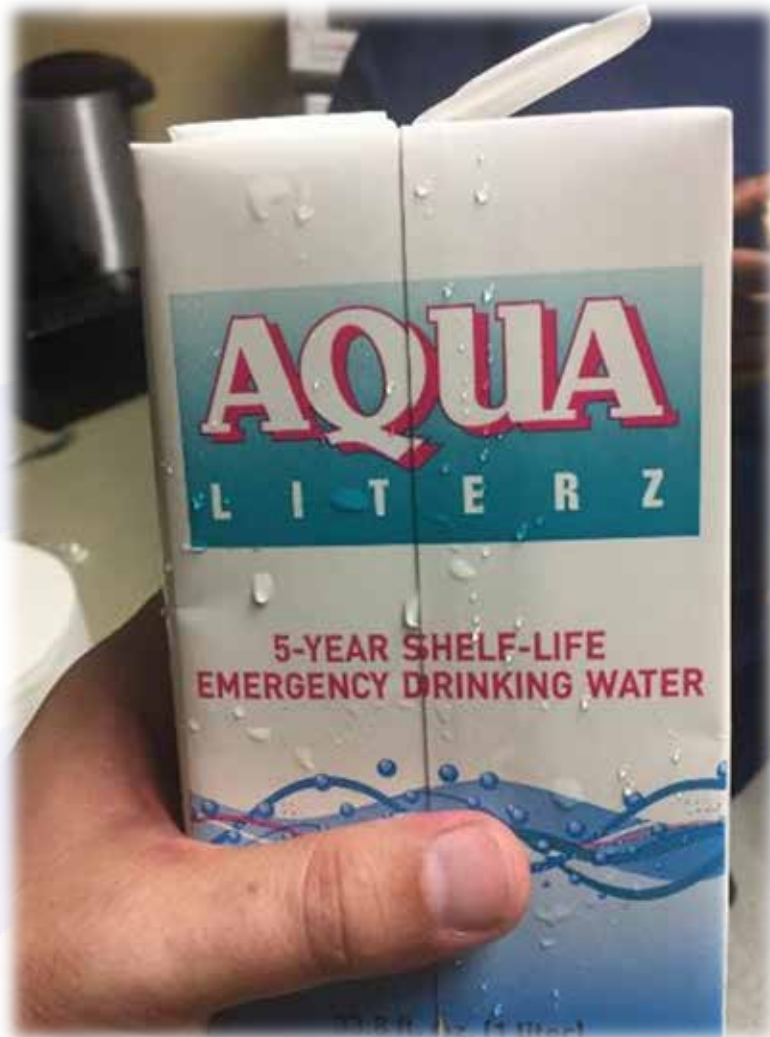
# Food Services







# Water



# Coffee







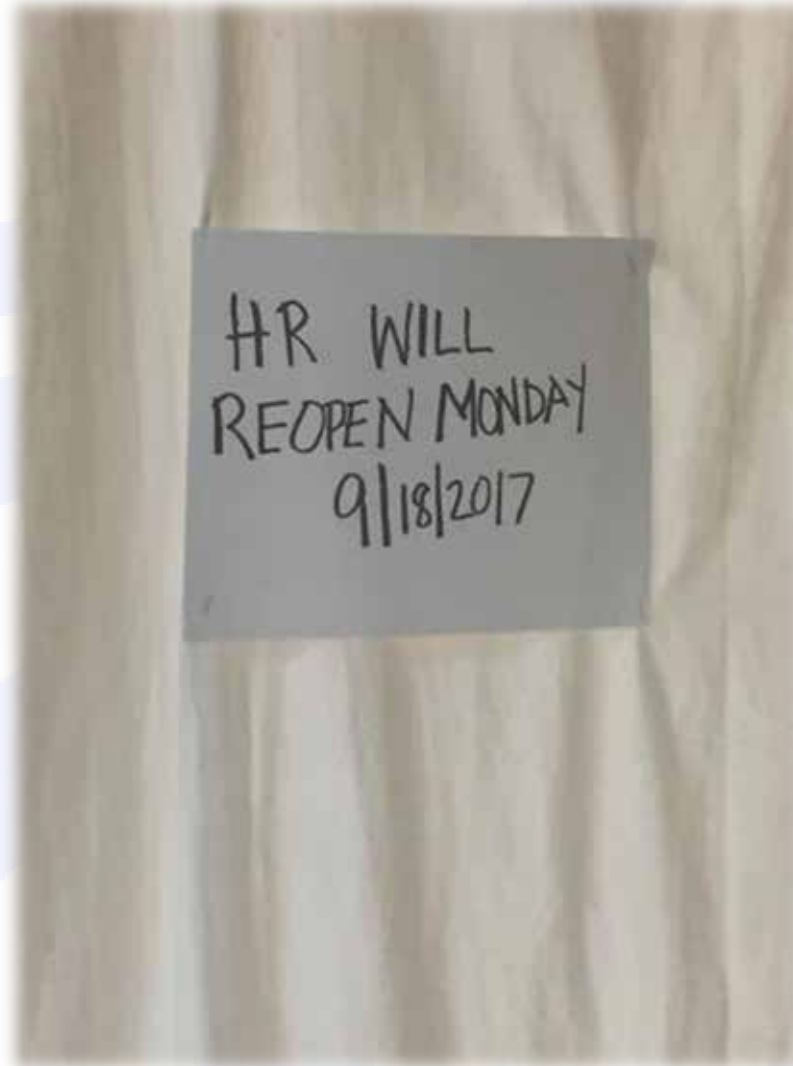
# Paperwork







# Human Resources

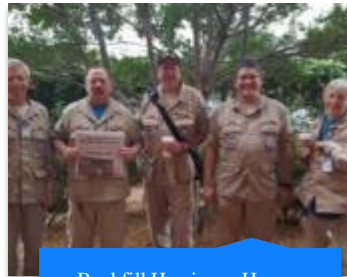


# Hearts and Souls

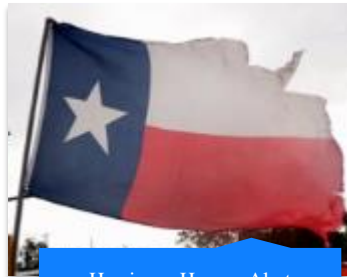




# Recap of Events



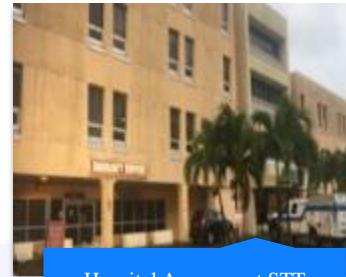
Backfill Hurricane Harvey  
Aug 25



Hurricane Harvey Alert  
Aug 29



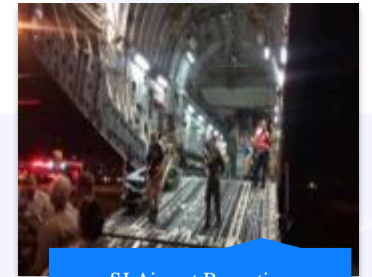
Puerto Rico – Irma  
Sept 4



Hospital Assessment STT  
Sept 7



HMTF to STT  
Sept 8



SJ Airport Reception  
Sept 8



Full DMAT Operations STT  
Sept 10



Demob/Staging  
Sept 19



Dialysis Shelter Operations



Dialysis Pt Evacuation PR –  
Miami



Shelter In Place – Maria  
Sept 20



Hospital Assessments  
Sept 21



Centro Medico BoO Setup  
Sept 23



HMTF STT Mission Completion  
Sept 30

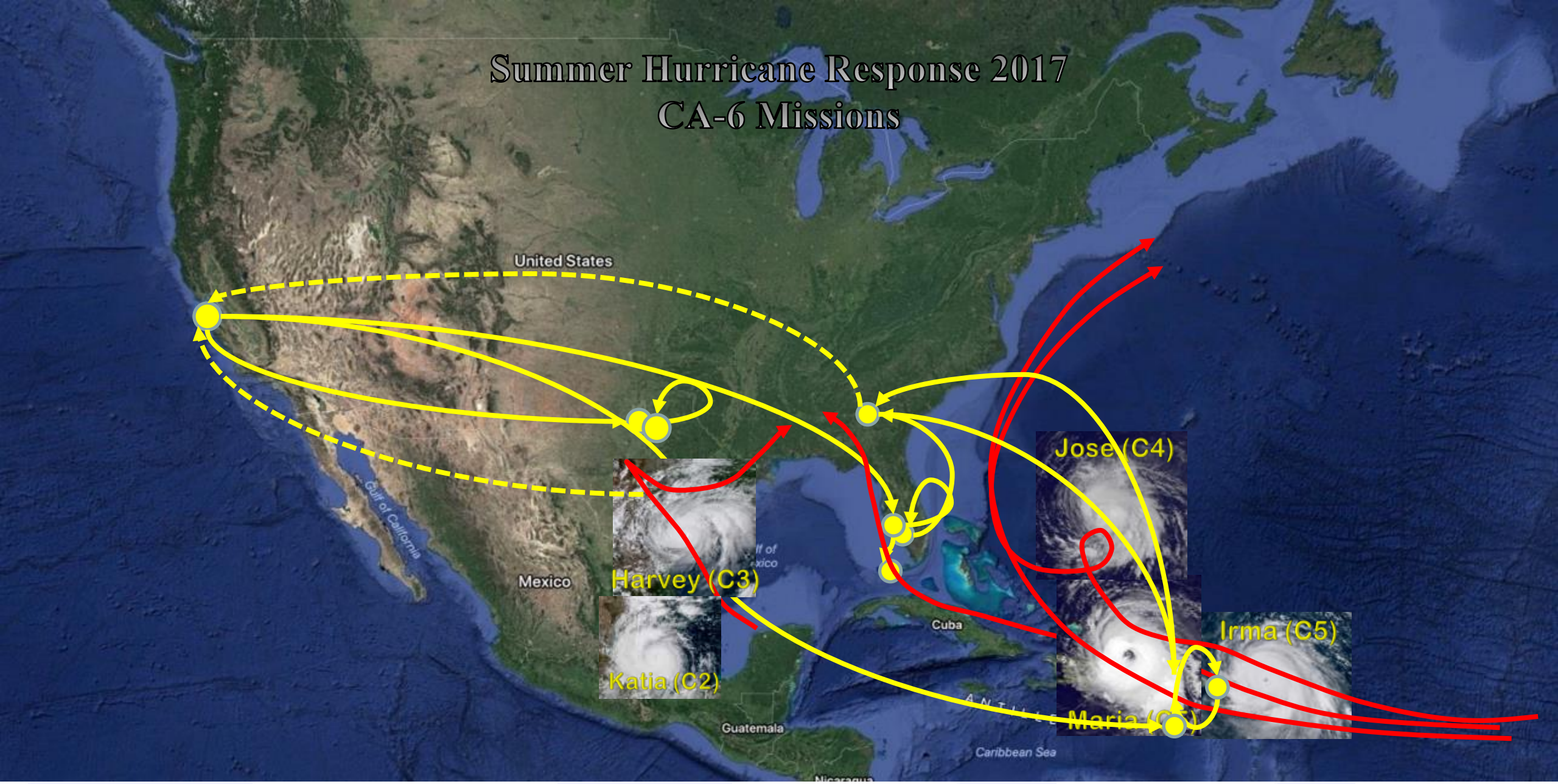


On-Going Backfill



# Summer Hurricane Response 2017

## CA-6 Missions





# In Closing

## HURRICANE RESPONSE AND RECOVERY



**4,674**  
personnel  
deployed



**36,370**  
patients  
cared for



**944**  
tons of  
equipment  
provided



**251**  
contractual  
actions valued  
at \$38.1 million

# THANK YOU!

Brandon Bond

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