Goals

- For those responding individually to disasters:
  - Explain how to avoid being kicked out as a nuisance.
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Erik Auf der Heide Ann Emerg Med article

- Dispatchers will hear of the disaster and send emergency response units to the scene.
- Trained emergency personnel will carry out field search and rescue.
- Trained emergency medical services personnel will carry out triage, provide first aid or stabilizing medical care, and—if necessary—decontaminate casualties before patient transport.
- Casualties will be transported to hospitals by ambulance.
- Casualties will be transported to hospitals appropriate for their needs and in such a manner that no hospitals receive a disproportionate number.
 Authorities at the scene will ensure that area hospitals are promptly notified of the disaster and the numbers, types, and severities of casualties to be transported to them.

 The most serious casualties will be the first to be transported to hospitals.

 Cranmer NEJM editorial

 many well-intentioned clinicians and health care organizations simply self-deployed and traveled to Louisiana, where their arrival compounded the overall disorganization of the effort to provide health care.

 Every one of them wanted and expected to save lives and alleviate suffering, but it was still logistically impossible for them to use their skills in the way they expected. Clearly, there was a disconnect between the aspirations of the army of volunteers and the actual needs of the victims of Hurricane Katrina.

 In the immediate aftermath of a disaster involving large, displaced populations, doctors, as difficult as it might be to accept, are one of the least useful commodities. The first priorities, standards in the developing world, are security and safety for the population, then water, sanitation, food, and shelter.
Once the humanitarian-aid staff is safe from danger, the most effective way to save lives is to ensure the availability of clean water, secure a place for bodily wastes away from the water supply, and then vaccinate every child younger than 15 against measles. Only after these needs have been addressed can curative care become operational.


- **Saturday, Sept 25, 2010 (flooding)**
  - Last night, a Cat 5 hurricane hit Long Island.
  - Thousands are dead or injured.
  - Within 3 blocks of the beach, it's just kindling

- **Sunday, Sept 26, 2010 (aerial and satellite)**
  - Long Island cut off from the mainland.
  - All bridges out
  - All airports damaged and closed
  - Too windy for helicopters but may clear soon.
  - Landline telephones all cut off.
  - Cellphone coverage very spotty, mostly not available.

- **Sunday, Sept 26, 2010 (Google Maps)**
  - Albany Medical Center ED gets a call from Steven Zimmerman, M.D., acting
ED chair at Good Samaritan Hospital (431 beds, 48K ED):
- badly damaged
- hundreds of patients waiting to be seen in ED
- no food, no water
- sends three pictures from cellphone:
  - ED staff entrance
  - best shelter near the hospital (roof intact)
  - landmark for helicopter LZ about 3 miles away with GPS coordinates
- FEMA-HHS IST
  - Albany can’t fly due to weather, contacts your local medical helicopter control, which contacts FEMA-NDMS IST
  - Helicopter control authorized to transport team to area; backup Coast Guard helicopter for final insertion if needed
- 8 people
- each with 70 lbs. of gear, no more
- will be dropped at the LZ 3 miles from hospital
- What do you pack? (Yee cartoon)
  - What will happen if you show up and say “I need a place to stay, food, water, and a hot shower?”
- Task and Threat Analysis
  - Security
  - Shelter
- Water
- Food
- Comms
- Navigation
- Travel
- Medical
- Who provides these?
- Helicopter service?
- Your hospital?
- Good Samaritan Hospital?
- West Islip?
- State of New York?
- FEMA?
- NDMS?
- You?

- Security
- 1-2 police officers?
  - You have narcotics. They know this. They will come and get them.

- Shelter
  - One extreme: DMAT

- Shelter
  - The other extreme: Hennessey Hammock

- Water
  - DMAT: bladder and purification system with showers

- Water:
  - Personal water treatment kit

- Food
- DMAT/Military: MRE (gum NOT a laxative!)
- **Food**
- Lightweight personal food
- **Comms**
- Encrypted DHS radio
- Satphone
- **Comms**
  - FRS radio (not rechargeable)
  - Ham radio, modified, does FRS and public safety
- **Navigation**
  - Road signs down
- **Directions**
  - (NOT navigation)
  - requires 12V car power
- **Navigation**
  - Map, compass, handheld GPS with spare batteries (again, directions more than navigation), laptop with 12V and 110V power supplies, USB GPS, Street Atlas (aircard and Google Maps, Traffic.com, Texas DOT during Gustav and Ike)
- **Travel (flooding and debris)**
  - Travel can be dangerous
- **Travel:** Military boot and DMAT in the back of a C-130.
  - If part of a military or Federal team, can assume (usually) some support. Not so if you’re by yourselves.
- **Travel: PFD, throw bag, boots and pack**
  - Standard lightweight personal backpacking gear is good.
- **Travel-Medical: headlight**
  - Handheld flashlights are nearly useless when traveling or doing medical care: recommend Petzl Tikka XP ($40)
- **Medical: DMAT Field hospital**
  - DMATs are full field ED-in-a-tent; if responding as a small team, will likely provide care at a field or regular hospital; depend on logistics folks to work on the right supplies and equipment.
- **Medical: Strike Team**
  - Might be part of small team with assigned medical kits for remote areas
- **Medical – Force Protection (WEMSI MedKit)**
  - But what about when you’re en route? What about your own medical needs, and your teams (“Force Protection” per FEMA)? Each medical person should have a personal wilderness-type medical kit.
- **Bring your own infrastructure**
  - Bottom line: better bring everything you need
- **The “What If?” Lifestyle - Pack**
  - Make up a list of gear you should remember to pack,
- keep as much disaster gear packed to respond at a moment’s notice as possible, highlight on the list what needs to be added, and where it usually lives
- keep 5 gal. of gasoline in your garage, ready to go

- **SAR Gear List:**
  - People make fun of my SAR and Disaster Gear List (you can view or download it online) but it might give you a place to start

- **The “What If?” Lifestyle – Spares**
  - get and carry spares:
    - spare cellphone battery
    - spare AA cells for FRS radio
    - spare cells and light bulb for headlamp
    - personal meds
    - carry backups for critical gear when possible (spare FRS radio, spare glasses or contacts)
  - toilet paper, Tampax

- **The “What If?” Lifestyle – Practice**
  - know how to program FRS radio; practice with it
  - know how to use all your cellphone’s features; practice with it
  - know how to fix all your gear
  - carry simple tools (Leatherman? Swiss Army knife? cable ties? self-
drilling screws? epoxy putty? Superglue? add to your list!)

- The “What If?” Lifestyle – Decisions
  - instead of a fancy cellphone with lots of features that doubles as an iPod, get a ruggedized, water-resistant cellphone
  - instead of that new BMW, get a used Jeep or Land Rover with a winch – practice with it

- The “What If” Lifestyle – Worry
  - have a disaster plan for those you leave at home
  - think about disasters a lot; stop what you’re doing to jot down a note about stuff to add to your gear
  - instead of watching TV, go through your gear over and over again
  - worry a lot; have your will made out
  - when you see a paranoid or OCD patients, ask for their ideas on personal disaster planning

- The “What If?” Lifestyle – Shape Up
  - don’t smoke
  - aerobic exercise
  - work out at the gym

- The “What If?” Lifestyle – Shape Up Your Mind
  - “hardening”
  - experience helps...
  - emergency medicine training/experience
- EMS training/experience
- outdoor/backcountry training/experience
- wilderness search and rescue training/experience
- disaster field training/experience

- Wilderness - Disaster
  - Time
  - Distance
  - Equipment
  - Terrain
  - Weather

- SAR Boot Camp - Survival
- SAR Boot Camp – Wilderness Travel
- SAR Boot Camp – Land Navigation
- SAR Boot Camp – Communications
- SAR Boot Camp – Improvised Rescue
- Wilderness Rescue
- Wilderness Rescue
- SAR Boot Camp – Wilderness First Aid
  - Red Cross book
- SAR Boot Camp – Wilderness First Aid
  - WMS-NSC book
- SAR Boot Camp – Wilderness First Aid
  - WMS Practice Guidelines
- SAR Boot Camp – Wilderness First Aid
  - cdsoutdoor.com
- SAR Boot Camp – Incident Management
- SAR Boot Camp – Incident Management (map)
“NOW,” said the rabbit. “THIS IS A SEARCH AND I’VE ORGANIZED IT...”
“DONE WHAT TO IT?” said Pooh.
“ORGANIZED IT. Which means... well, it’s what you do to a search, when you don’t all look in the same place at once...”

--A.A. Milne, 1928

- Incident Management - ICS Training
- ASRC-PSARC websites
- How do I get to go?
- DHS/FEMA
- DHHS/NDMS
- EMAC
- JRC?
- If I go, will I get in trouble?
- Are you licensed where you are going?
- Will you have malpractice coverage?
- Federal teams: sovereign immunity
- EMAC request: licensure waived
- CERT
- Community Emergency Response Teams
- 8-16 hours training for lay public
- CERT team in every neighborhood
- To train 2x/year
- Some CERT teams are very active and may respond outside their areas
- MRC
Are there core competencies required to become an MRC volunteer?

The MRC program will soon establish core competencies, possibly using elements of the American Red Cross basic training.

- EMAC
- UEVHSA
- ESAR-VHP
- RJRCVMAT
- DMORT
- IMSuRT
- DMAT
- USAR

(8 pictures of DMAT Katrina and 1 URL slide)

(Sources of Power)

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(Links)

- www.conovers.org
- www.psarc.org