

Coastal Storm Planning,  
the Healthcare Facility Evacuation  
Center (HEC), and Patient Tracking

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Remember; when disaster strikes,  
the time to prepare has passed.

-- Steven Cyros



# Coastal Storm Planning

- Where it was
- Where it is
- Where it's going

# Introduction

The Healthcare Facility Evacuation Center (HEC) is a NYSDOH-run entity that coordinates the evacuation, shelter-in-place (as needed), and repatriation of healthcare facilities during a regional multi-facility evacuation scenario with the assistance of multi-agency partners that are specific to the region that the HEC is operating in. These agencies include local health departments, offices of emergency management, and healthcare facility associations among others.

# History of the HEC

- NYC Coastal Storm Plan
  - Coastal Storm Activation Playbook
  - Evacuation Plan
  - Recovery and Restoration Plan
  - Sheltering Plan
  - Logistics Plan
  - Public Information Plan
  - Debris Management Plan
  - **Healthcare Facility Evacuation Plan**

# Healthcare Facility Evacuation Plan

- Healthcare Facility Evacuation Center (HEC)
  - Finds beds for evacuating facilities
  - Arranges transportation between facilities
  - Provides guidance to receiving facilities
  - Provides shelter-in-place guidance
  - Troubleshoots evacuation issues
  - Assists with repatriation

# HEC

- Facility Communication
  - Hospitals
  - Nursing Homes
  - Adult Care Facilities
- Regional Coordination
  - Nassau
  - Suffolk
  - Westchester
- Transportation
  - Ambulances
  - Ambulettes
  - Buses
- Field Operations
  - Coordination specialist

# The Players

- New York State Department of Health (NYSDOH)
- New York City Office of Emergency Management (NYC OEM)
- Greater NY Hospital Association (GNYHA)
- Health & Hospitals Corporation (HHC)
- NYC Department of Health and Mental Hygiene (DOHMH)
- Veterans Administration (VA)
- NYS Office of Mental Health (OMH)
- Multiple nursing home associations



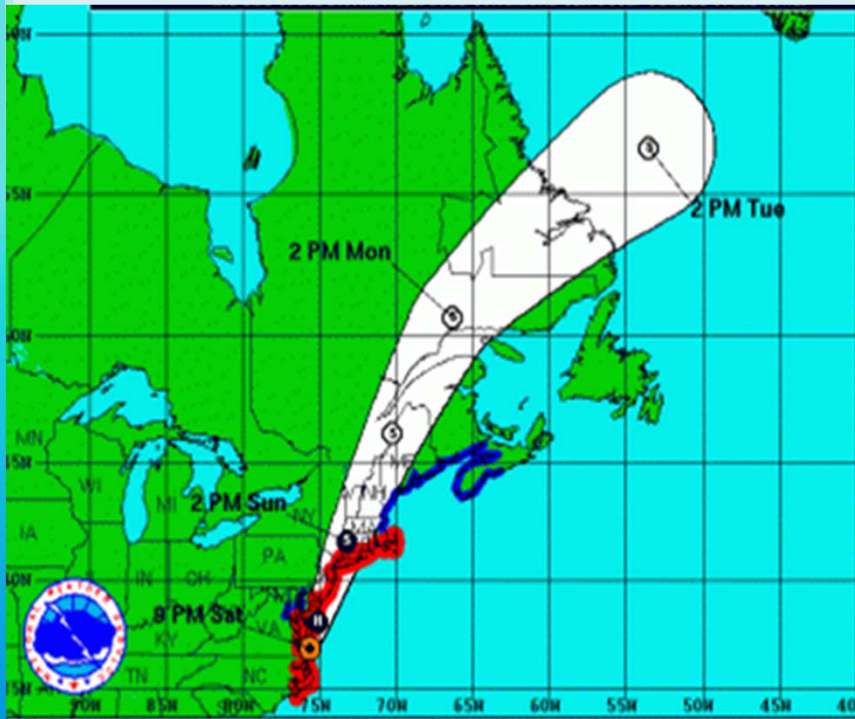
# The Players (Transportation)

- NYSDOH
- NYC OEM
- NYC Fire Department (FDNY)
- Regional EMS Council (REMSCO)
- Metropolitan Transportation Authority (MTA)
- Taxi & Limousine Commission (TLC)
- NYC Department of Education (DOE)

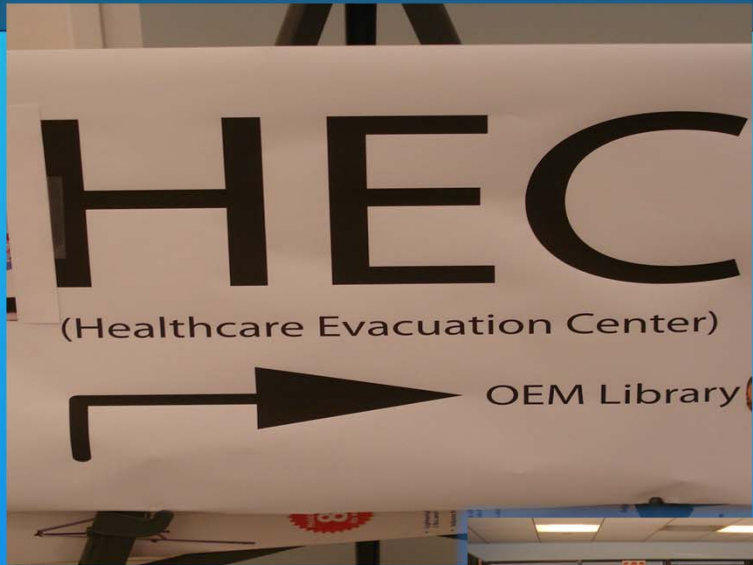
# A Tale of Two Hurricanes

Irene (and Lee)

Sandy



# Healthcare Evacuation Center (HEC)



# Challenges

- Transportation resources
- Bed availability
- Communications
- Ensuring adequate staffing with mission expansion
- Feeding the beast (sitreps, dashboards, reports, etc.)

# Between Hurricanes

- Healthcare Evacuation Plan Update
  - ~10 months
  - 12 workgroups
  - ~85 deliverables
  - >25 planning partners (with consensus)
- Focus
  - SiP, Data systems, regionalization, structure, command/control, HEC facility, sending/receiving arrangements, etc etc etc etc

# Between Hurricanes

- Healthcare Evacuation Plan Update
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- Focus
  - SiP, Data systems, regionalization, structure, command/control, HEC facility, sending/receiving arrangements, etc etc etc etc

Plenty of time!!!

# What was accomplished

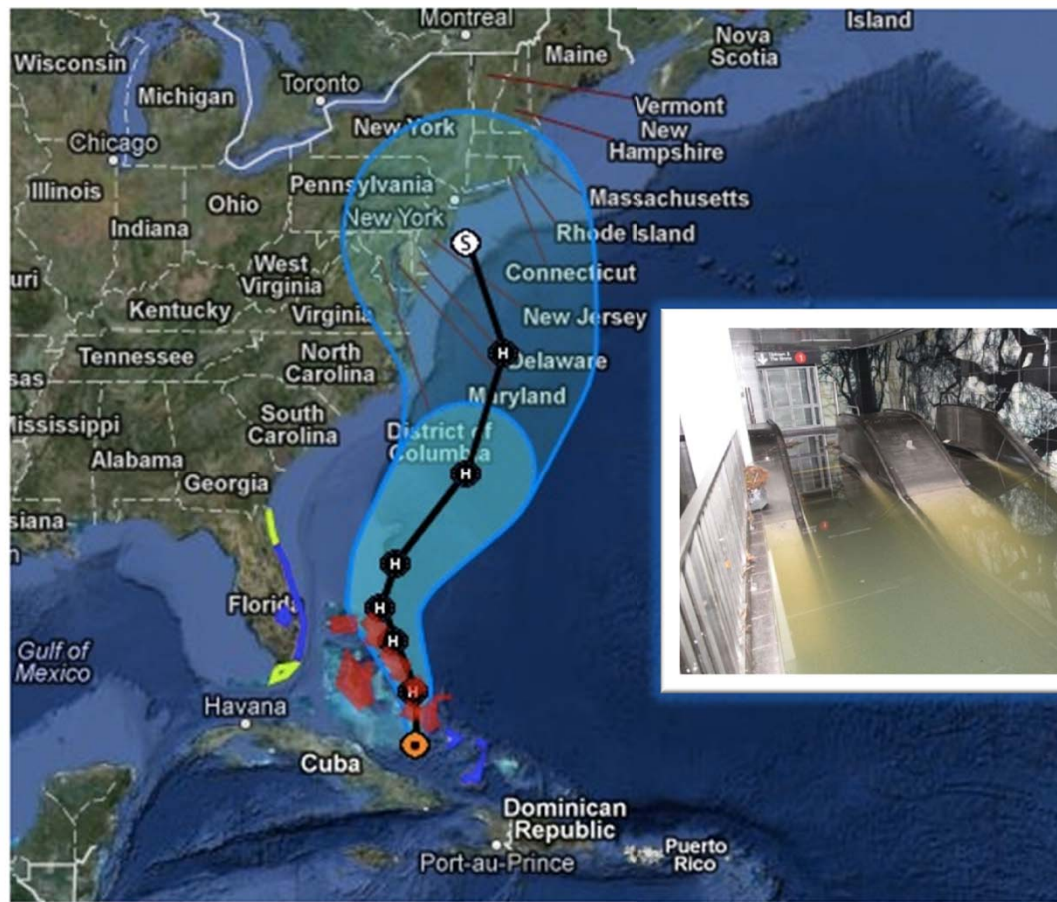
- Majority of Shelter-in-Place work
  - Send/receive arrangements, SiP surveys, Receiving surveys, data analysis, reports, etc.
- HEC Manual
  - JAS, floor plans, timelines, org chart, info flow, scripts, templates, etc.
- Command and Control
- Transportation

# What wasn't completed

- HEC Facility (partially completed – but backup plan was in place)
- Regional Coordination (partially completed)
- Finance (partially completed)
- Repatriation (partially completed)
- Data systems (partially completed)



# Hurricane Sandy Oct. 29<sup>th</sup> 2012



(Photo : National Hurricane Center) Projected path map of Hurricane Sandy.



# What Sandy really was



# Healthcare Facility Evacuations

- Evacuations:
  - 6,001 Patients and residents were evacuated from NYC Healthcare Facilities
  - 51 Facilities evacuated in NYC, Nassau, Westchester and Suffolk Counties

|                             | NYC              | Nassau | Westchester | Suffolk                           |
|-----------------------------|------------------|--------|-------------|-----------------------------------|
| Hospitals (H)               | 6 (w/VA and OMH) | 1      | 0           | 3 (partial – voluntary pre-storm) |
| Nursing Homes (NH)          | 17               | 5      | 1           | 2                                 |
| Adult Care Facilities (ACF) | 14               | 3      | 2           | 3                                 |
| Totals:                     | 37               | 9      | 3           | 8                                 |

# What the HEC was supposed to do

- Healthcare Facility Evacuation Center (HEC)
  - Finds beds for evacuating facilities
  - Arranges transportation between facilities
  - Provides guidance to receiving facilities
  - Provides shelter-in-place guidance
  - Troubleshoots evacuation issues
  - Repatriation

# What the HEC did (Mission creep)

- All of the above and some...
  - Dialysis facilities (ESRDs)
  - Fueling for vehicles and generators
  - Generator and pump deployment/sustainment
  - HHS Liaison (coordinating DMAT's, FMS, etc.)
  - Wellness checks
  - Interim housing/facility procurement/placement
  - Home care staff/agency problem resolution
  - Logistics support to HCFs (meals, equipment, etc.)
  - Patient tracking and family assistance (until system in place)
  - Miscellaneous duties as assigned

# Irene vs. Sandy

|           | Irene                              | Sandy                                   |
|-----------|------------------------------------|---|
| Evac      | ~10,000 pre-storm                  | ~6,000 with<br>~7,600 movements         |
| HEC       | 6 days w/<br>repatriation complete | 25 days<br>w/repatriation still ongoing |
| HEC Staff | ~18                                | ~40                                     |

# So now what...

- Regionalization
- Data systems
- SiP, sending/receiving arrangements, receiving surveys
- HEC Facility
- Repatriation
- Billing and reimbursement
- Training and exercises

# Future of the HEC

- Statewide applicability
  - Statewide implementation 2013-2014
- Scalable
- Non-hurricane scenarios
  - Power outages
  - Natural disasters
  - Target patient populations (burn surge, etc.)
  - Others



# The 2013 HEC

- Changes to the operations
- Changes to the staffing
- Changes to the structure
- Changes to the players

# Evacuation Decisions

- Facility level
  - You are ultimately responsible for the safety and security of your patients or residents
  - What factors play into the decision?
- Local chief elected official
  - Statutorily identified as the person responsible for issuing a mandatory evacuation
  - What factors play into the decision?

# When to use the HEC

- Pre-HEC Activation
  - All HCFs continue to use their partnerships and resources in their evacuation decision-making and operations
- HEC Activation
  - Once HEC is activated, the HEC must be notified of all patient movements to provide better situational awareness and COP

# When to use the HEC

- Mandatory Evacuation Order (NYC specific)
  - If a mandatory evacuation order is issued by the local chief elected official, all transportation resources will be coordinated through the HEC
    - Exception: If a system is moving patients within their system and using their own resources, they just need to notify the HEC of those movements

# HEC Communications

- Two-way
  - Increased information sharing between HEC and other planning partners
  - New and unified sitrep format
- POC Information
  - NYSDOH Health Commerce System Communications Directory
  - Updated information obtained at the beginning of the response

# How to use the HEC

- All HCFs and planning partners will be notified in advance, when the HEC is going to be activated and how to contact the HEC

# HEC Staffing

- Same agencies as last year
  - NYSDOH, NYCDOHMH, NYC OEM, GNYHA, SNY, etc.
  - Increased presence of NYSDOH staff
- Increased training for identified HEC staff

# New players

- Regionalization
  - Nassau
  - Suffolk
  - Westchester Counties
  - Coordinated through NYSDOH reps in each county EOC
- Two-way information flow



# What the HEC is used for

- Bed matching
- Transportation resources
- Shelter-in-Place issues

# What local ESF-8 is used for

- Everything else
  - Generators
  - Fuel
  - Placards
  - ESRD issues
  - Etc
  - Etc

# How to contact the HEC

- A single phone number will be broadcast to all HCFs and response partners when they are notified about the HEC opening
- Items that are not HEC related will be routed to the respective ESF-8 for further handling
- Contacting your local ESF-8
- Contact numbers will be shared

# Bed Matching

- What is entails
- How is it done within the HEC
- HEC responsibilities versus facility responsibilities

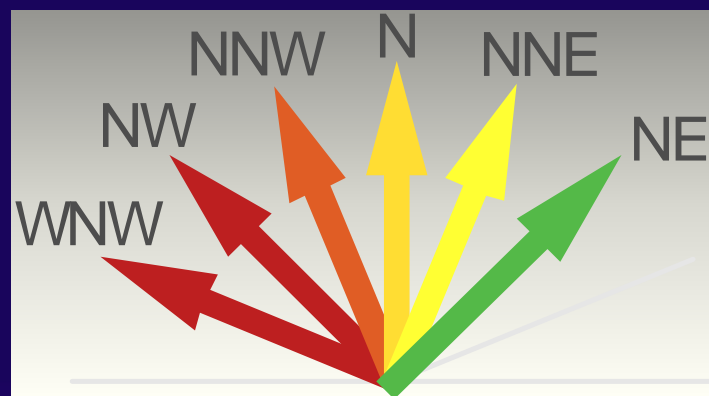
# Evacuation Zones

- New York City
  - Zones have expanded from A, B, C to 1-6
- Suffolk County
  - No change
- Nassau County
  - No change
- Westchester County
  - No change

# Maximum Surge Heights by Storm Bearing

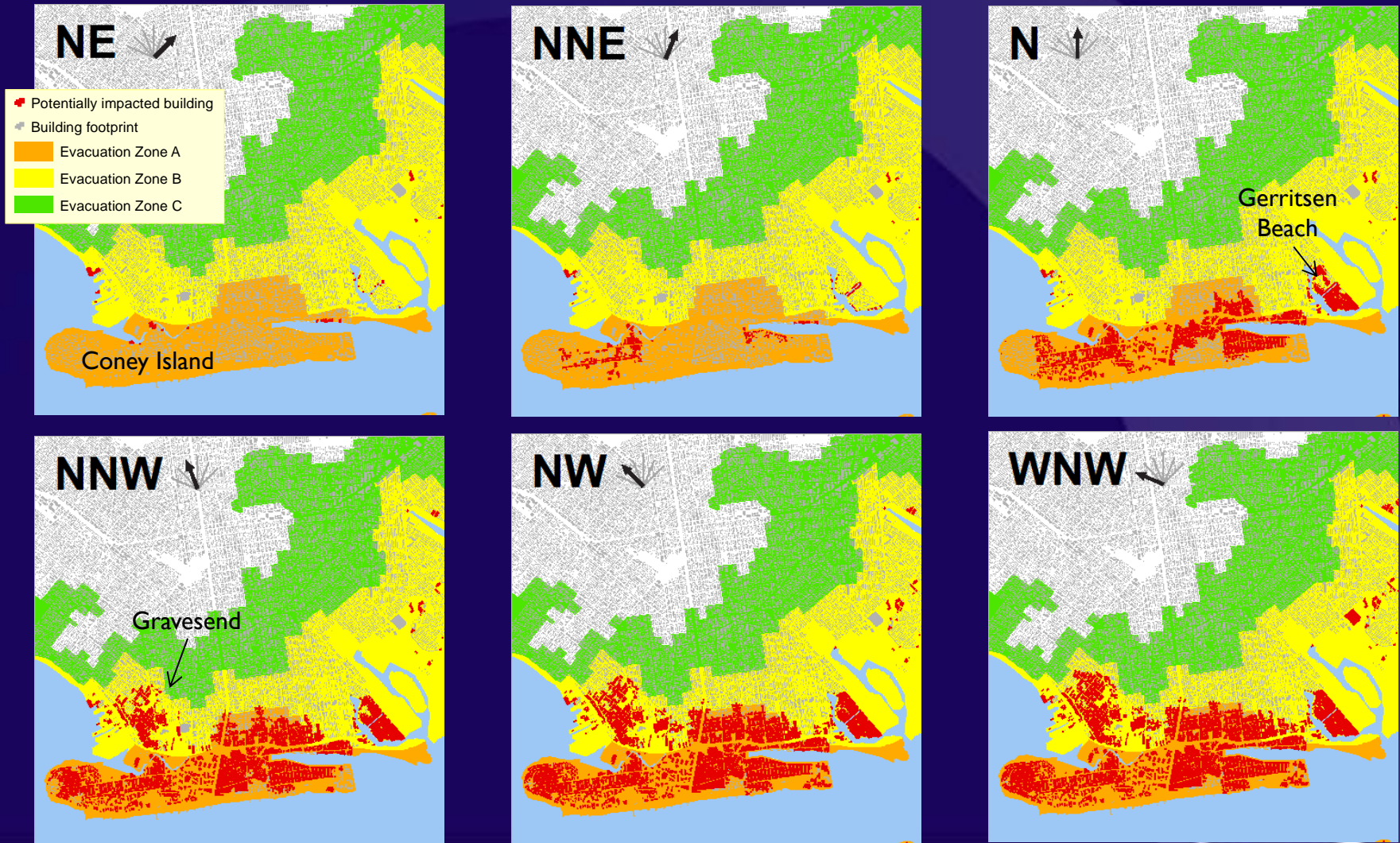
|            | WNW  | NW   | NNW  | N    | NNE  | NE   |
|------------|------|------|------|------|------|------|
| Category 1 | 12.6 | 12.1 | 10.7 | 8.8  | 6.6  | 5    |
| Category 2 | 20.9 | 20   | 20.1 | 16.5 | 11.4 | 8.1  |
| Category 3 | 26.6 | 27.6 | 27.4 | 23.4 | 17   | 11.3 |
| Category 4 | 32.4 | 33.9 | 33.9 | 30.6 | 21.7 | 14.6 |

Storm bearings



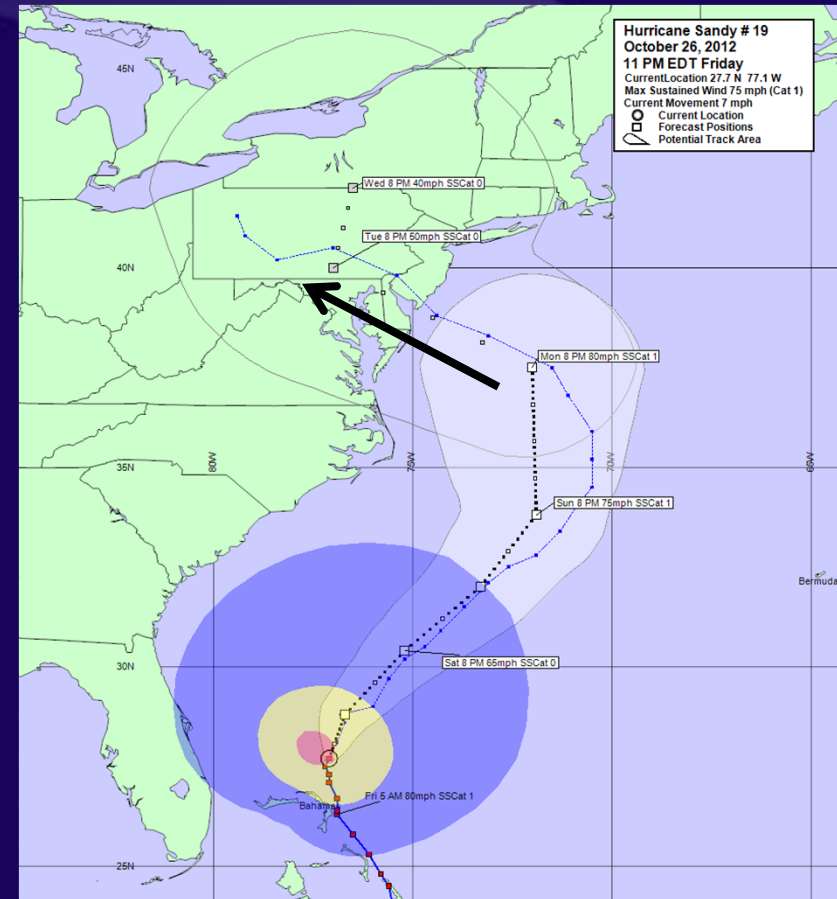
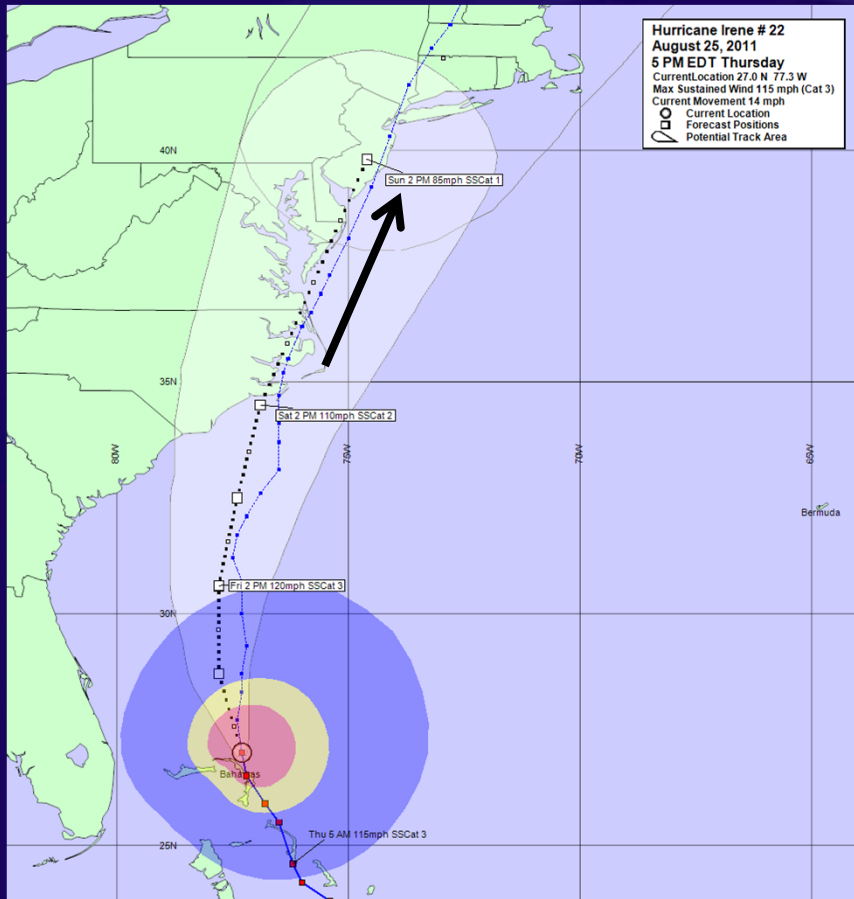
# Potential Building Impacts: Cat 1 Hurricanes

*Buildings potentially impacted by worst-case surge based on hurricane bearing*



# Irene – NNE bearing

# Sandy – WNW bearing (NW at landfall)



Predicted storm tracks for both storms 70 hours before landfall



# Bearing Based Proposal

- Bearing has significant effect of storm surge
- Allows for more flexibility in evacuation (less likely to over- or under- evacuate)
- Storm track predictions are more accurate than predictions of intensity

**Proposed zones**

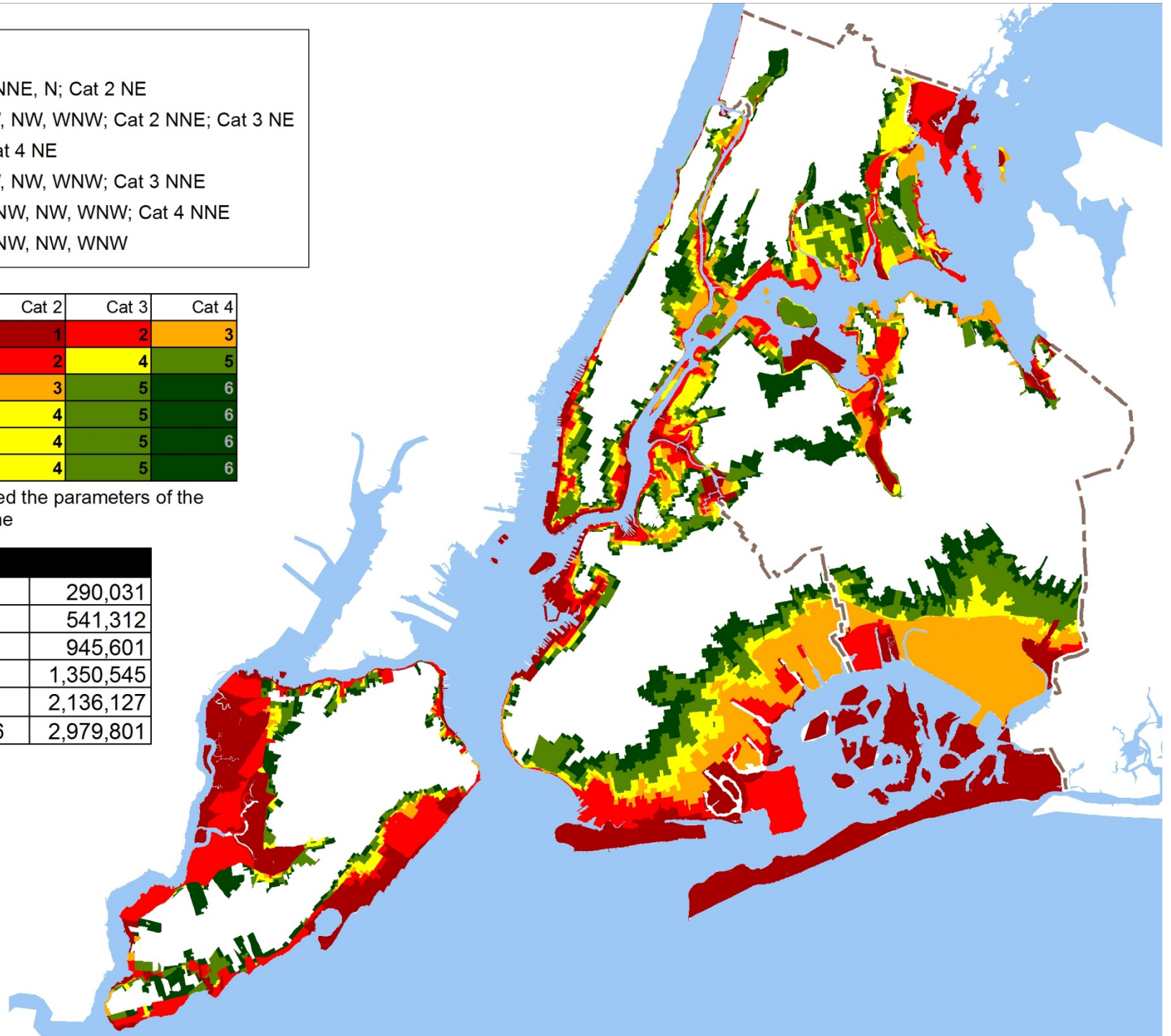
- 1 - Cat 1 NE, NNE, N; Cat 2 NE
- 2 - Cat 1 NNW, NW, WNW; Cat 2 NNE; Cat 3 NE
- 3 - Cat 2 N; Cat 4 NE
- 4 - Cat 2 NNW, NW, WNW; Cat 3 NNE
- 5 - Cat 3 N, NNW, NW, WNW; Cat 4 NNE
- 6 - Cat 4 N, NNW, NW, WNW

|     | Cat 1 | Cat 2 | Cat 3 | Cat 4 |
|-----|-------|-------|-------|-------|
| NE  | 1     | 1     | 2     | 3     |
| NNE | 1     | 2     | 4     | 5     |
| N   | 1     | 3     | 5     | 6     |
| NNW | 2     | 4     | 5     | 6     |
| NW  | 2     | 4     | 5     | 6     |
| WNW | 2     | 4     | 5     | 6     |

\* For storms that exceed the parameters of the model, go up one zone

**2010 Population**

|                  |           |
|------------------|-----------|
| Zone 1           | 290,031   |
| Zone 1+2         | 541,312   |
| Zone 1+2+3       | 945,601   |
| Zone 1+2+3+4     | 1,350,545 |
| Zone 1+2+3+4+5   | 2,136,127 |
| Zone 1+2+3+4+5+6 | 2,979,801 |



| Facility              | 2012   |        |        |       |
|-----------------------|--------|--------|--------|-------|
|                       | Zone A | Zone B | Zone C | Total |
| Hospitals             | 6      | 2      | 13     | 21    |
| Nursing homes         | 22     | 12     | 27     | 61    |
| Adult care facilities | 17     | 8      | 9      | 34    |

| Facility              | 2013   |        |        |        |        |        |       |
|-----------------------|--------|--------|--------|--------|--------|--------|-------|
|                       | Zone 1 | Zone 2 | Zone 3 | Zone 4 | Zone 5 | Zone 6 | Total |
| Hospitals             | 4      | 4      | 0      | 6      | 9      | 2      | 25    |
| Nursing homes         | 23     | 6      | 8      | 6      | 19     | 9      | 71    |
| Adult care facilities | 17     | 4      | 2      | 7      | 6      | 3      | 39    |

# Shelter-in-Place

- Does NOT involve entire facilities
- Should only include those patients/residents whose risk of a negative outcome from moving exceeds the risk from sheltering-in-place
- Whether or not SiP will be allowed is part of the evacuation decision

# Planning Considerations

- Have you reviewed your plan since Sandy?
- Have you updated your plan since Sandy?
- Have you trained staff to your plan?
- Have you exercised your plan?

# Planning Considerations

- HCFs are regulated by the State Commissioner of Health
- The local chief elected official or his/her designated representative is responsible for issuing evacuation orders
- Storm forecasts will change resulting in compressed decision-making timelines and operational constraints
- NYSDOH requires every HCF's to create and maintain a written facility evacuation plan:
  - Hospital: Public Health Law (PHL) Title 10 Sec. 401.2
  - Nursing Homes PHL regulatory section 415.26 (f)
  - Adult Care Facilities PHL Sections 487.12 & 488.12 Title 18

# Planning Considerations

- The threat to HCFs and patients/ residents, as well as to agency and support personnel, increases as the storm approaches
- All evacuation activities must be completed prior to **“Zero Hour”** (defined as the onset of tropical storm force winds of 39 mph or greater)
- HCFs in Evacuation Zones may incur damage that prevents the immediate return of evacuated patients/ residents
- HCFs within the 5 boroughs of NYC but outside Evacuation Zones are designated receiving facilities, or receiving HCFs (NYC specific)
- HCFs located outside the city will be designated receiving HCFs when conditions require (NYC specific)
- Mass transit shutdown at +8 hours (NYC specific)

HEC vs. Facility  
Decision Making Timelines  
96 Hours to **Zero Hour**

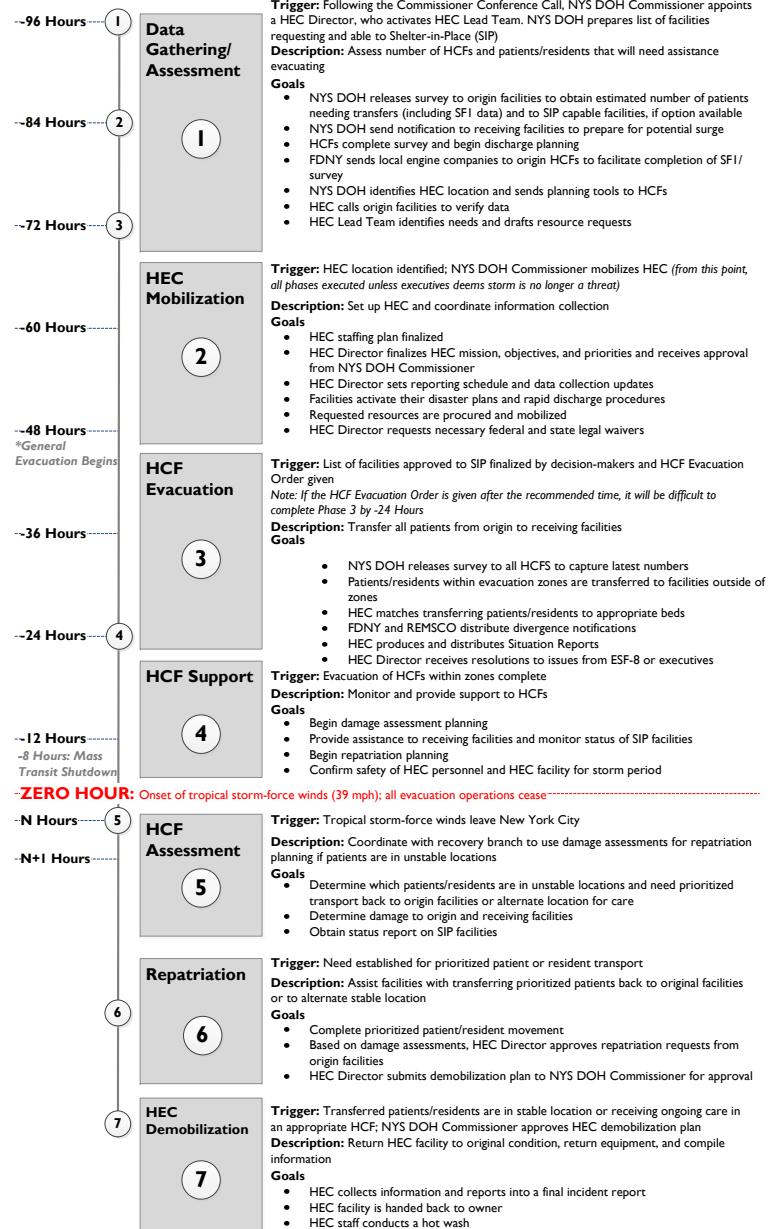


# HEC Activities

- -96 to -84 Hours
  - Information gathering
  - Activation and notification
- -84 to -72 Hours
  - Recommendation to NYC Local Chief Elected Official regarding evacuation/SiP
- -24 Hours
  - HCF evacuation complete
- What does this timeline mean?
- What is this timeline dependent upon?

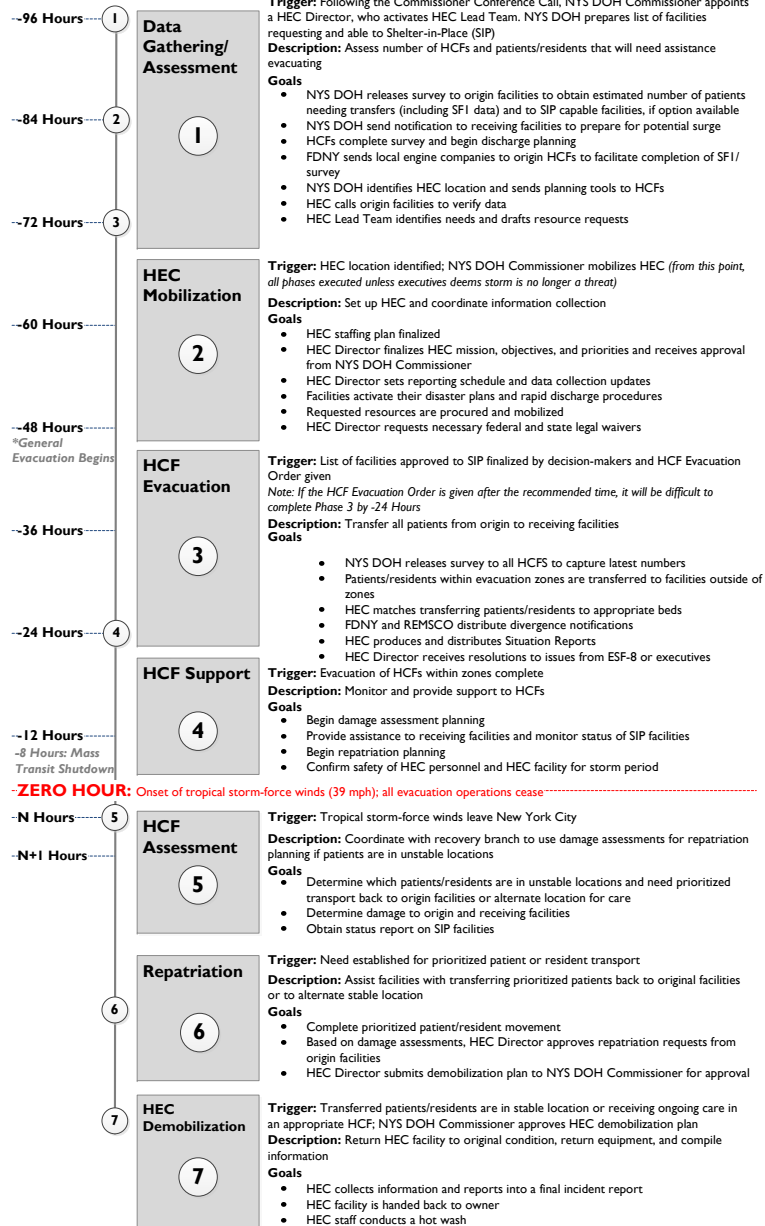
# HEC DECISION-MAKING TIMELINE- NYC Only

## PHASES OF OPERATION

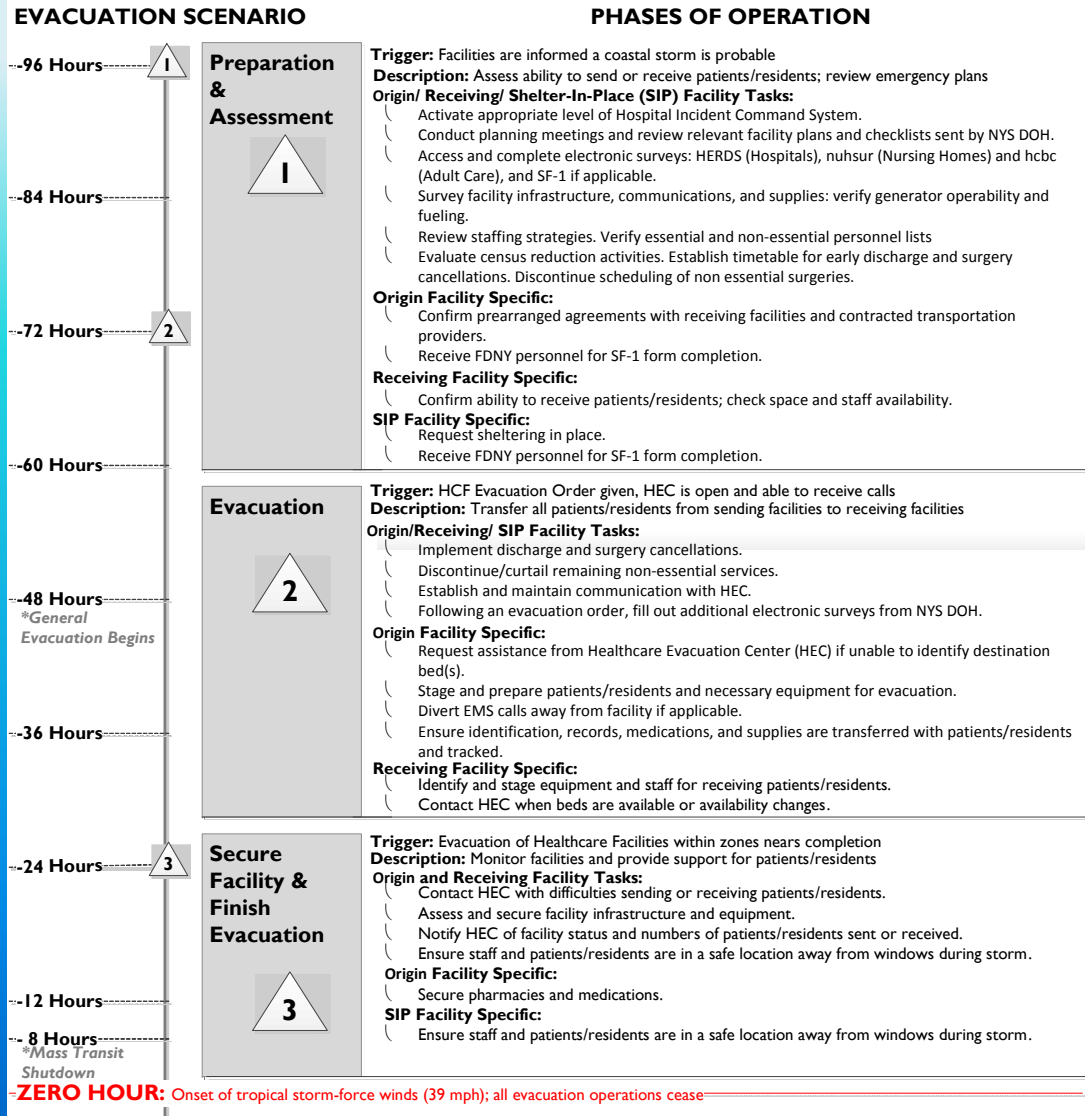


# HEC DECISION-MAKING TIMELINE- Non-NYC

## PHASES OF OPERATION



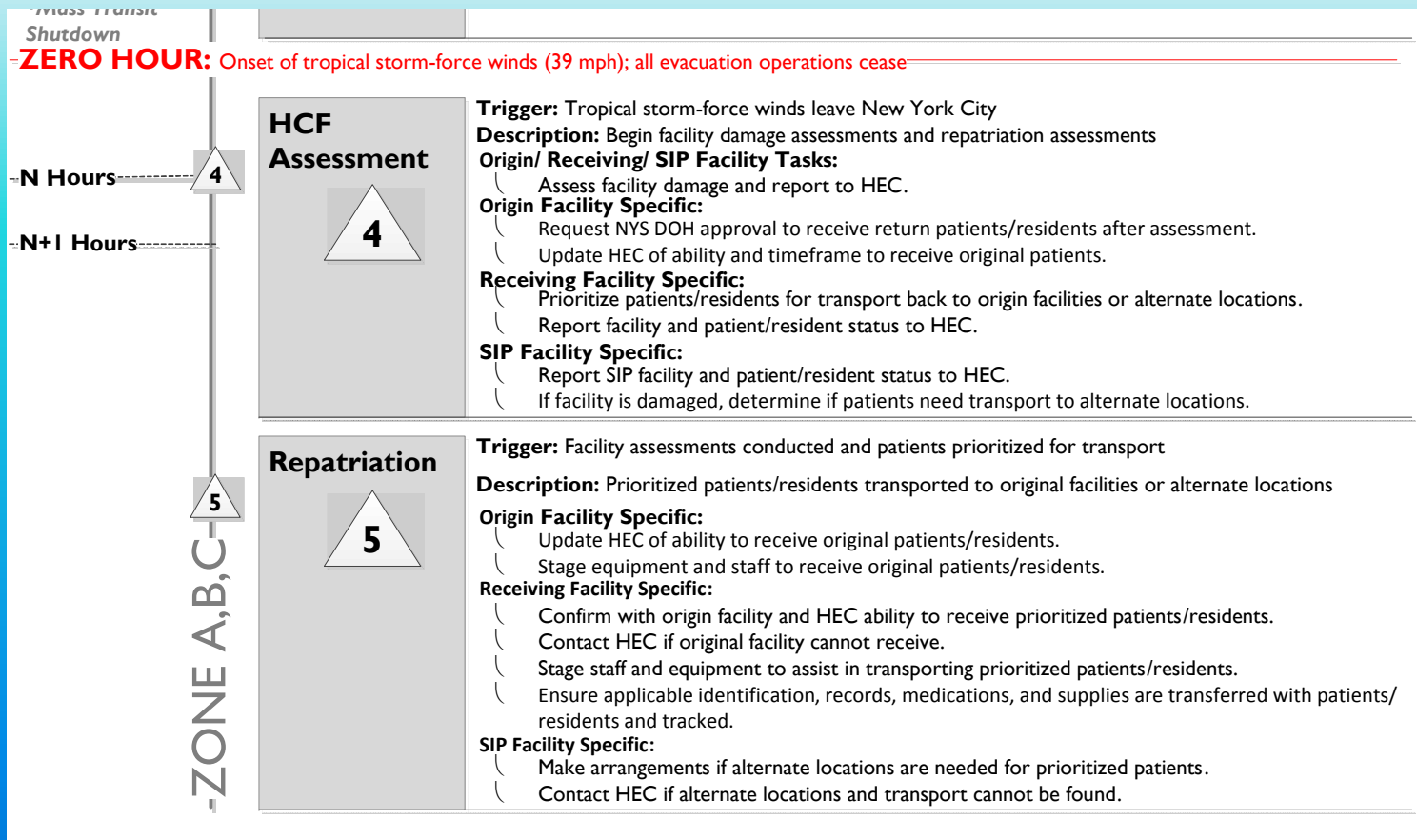
# Facility timelines



\*General Evacuation Begins

\*Mass Transit Shutdown

# Facility timelines



# Facility Activities

- Information gathering / Situational Awareness
- Evacuation decisions
  - Who to evacuate
  - Who to SiP
  - Staffing availability / housing
  - Supplies

# Facility Activities

- Gas shortages?
- Prolonged power outage?
- Facility damage?
- When to evacuate
- Operating through the storm impact
- Target start time and target completion time
  - Dependent upon location, size, etc.

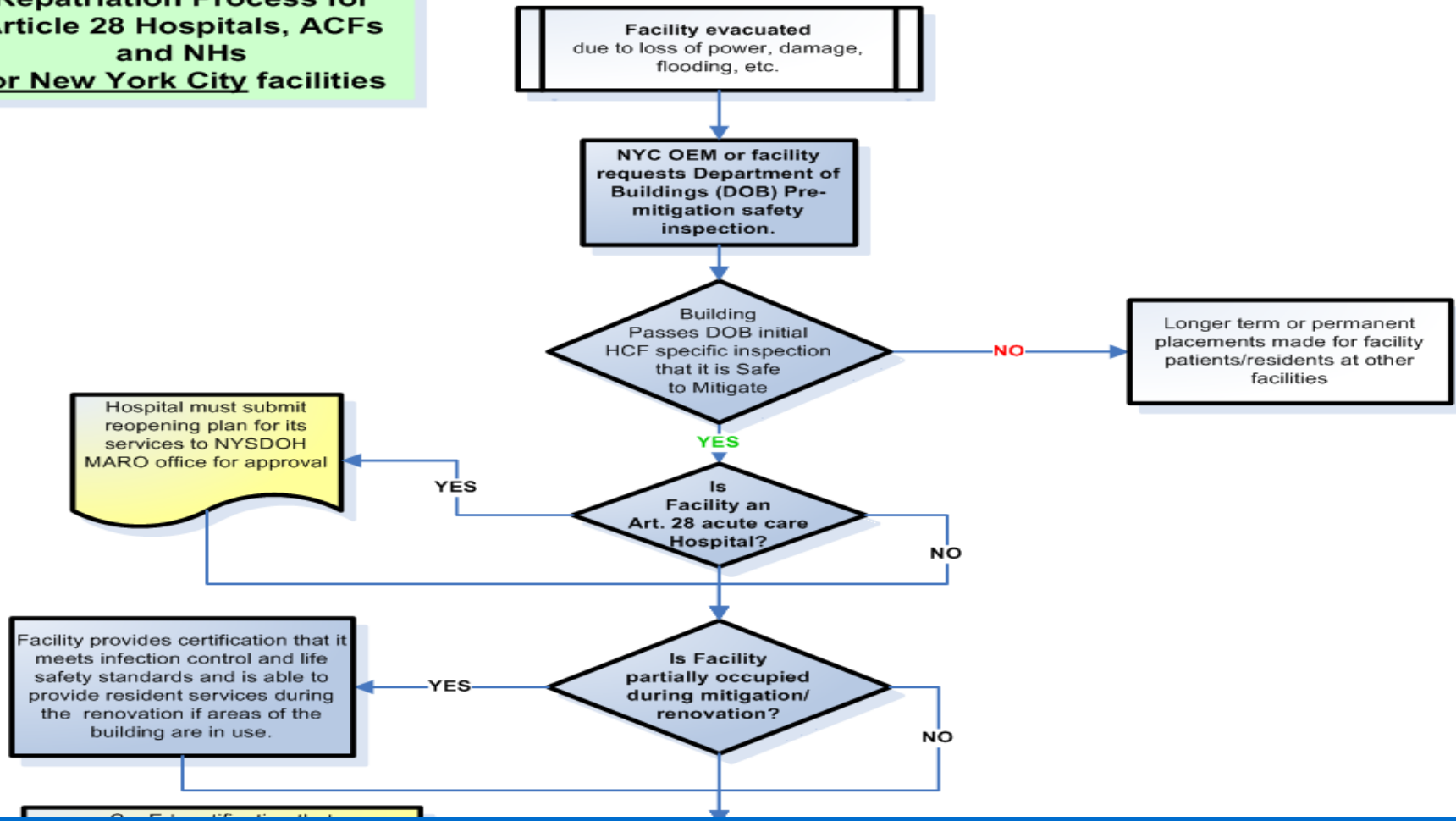
# Repatriation

- Meet local requirements
- Meet NYSDOH requirements
- Through HEC or NYSDOH Central Office
- Final approval through NYSDOH Central Office

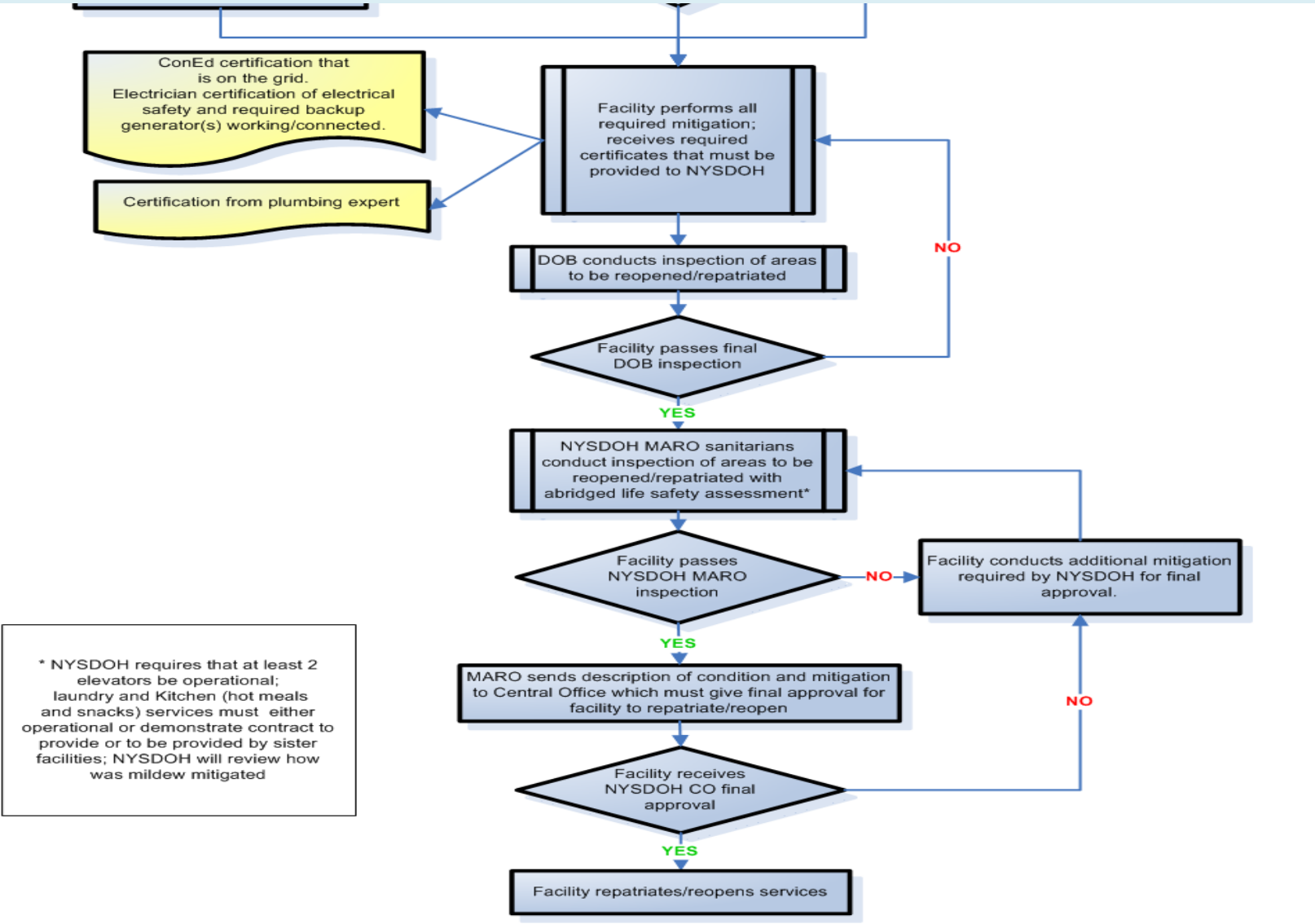


# DRAFT

## Repatriation Process for Article 28 Hospitals, ACFs and NHs for New York City facilities



# Draft



# “Take Aways” for **ALL** HCFs

- Work **YOUR FACILITY’S** Evacuation or Surge Plans
  - Send / Receive arrangements
  - Shelter in Place (SiP) plans and protocols
- Expect Surveys & Phone Calls
  - HERDS, NuhSur, HCBC
  - Phone calls from the HEC to establish evacuation needs and receiving capability
- Need to designate key points of contact for the Facility and back up/by shift

# “Take Aways” for **ALL** HCFs

- **Stay TUNED !**

- In most emergencies if additional guidance or information is needed – this will be issued

- Posted on the Health Commerce System (HCS);
- Via IHANS alert;
- Other systems such as email, conference calls;
- Individual communications by Regional NYSDOH representatives, HEC representatives, NYC OEM, NYCDOHMH, FDNY, etc.

Questions?

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New York State  
**FINDS**  
Evacuation of Facilities in Disasters System

## Operational Considerations

# History of e-FINDS

- Need
- Concept
- Development
- Implementation
- 2<sup>nd</sup> iteration
- Future versions



# eFINDS

- Training
  - Overviews
  - WebEx
    - Live
    - Recorded
  - Regional Training Centers
  - Associations
  - NYSDOH Regional Offices
  - Others
- Exercising
  - Training “operation” within eFINDS
- Implementation Guide





# Accessing eFINDS

- NYSDOH Communications Directory Roles
  - E-FINDS Data Reporter
    - User level
  - E-FINDS Reporting Administrator
    - Facility/LHD Admin
  - E-FINDS Application Administrator
    - NYSDOH only
  - OEM Link
    - User
- LHD vs. RO vs. CO access levels
- Facilities within systems
  - Person needs to be added by each facility
- Associations
  - Person needs to be added by each facility



# Patient Tracking System Operations

- NYSDOH will notify all HCFs when wristbanding of patients or residents must begin
  - The specifics of how the facilities apply wristbands and entering data is up to the facility
- An “operation” will be created in the system that all HCFs will be able to access
- eFINDS should be used in accordance with the training



# Scenarios

- Pre-planned evacuation
  - With internet access
    - With scanners
    - Without scanners
  - Without internet access
- No notice evacuation
  - With internet access
    - With scanners
    - Without scanners
  - Without internet access



# Pre-planned evacuation

- Sending facility
  - Ensure that first name, last name, and DOB at a minimum are entered into system
  - If patient/resident is shelter-in-place, identify as such
  - If patient/resident is being transferred and destination is identified, enter the destination information
- Receiving facility
  - Change patient/resident 's current location to new facility and update any necessary information



# No Notice Evacuation

- Sending facility (if time permits)
  - Ensure that first name, last name, and DOB at a minimum are entered into system
  - If patient/resident is shelter-in-place, identify as such
  - If patient/resident is being transferred and destination is identified, enter the destination information
- Receiving facility
  - Change patient/resident 's current location to new facility and enter/update any necessary information



# e-FINDS Data

- What is collected
- How is it collected
- Who can see what
  - Permissions based
- How is it helpful post-storm



# Future of e-FINDS

- Future rollouts
- Statewide implementation
- Implementation with other “O” Agencies
  - OASAS
  - OMH
  - OPWDD
  - OCFS
  - OTDA



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