



**New York City Council Hearing**

**NYC Hospitals Preparedness for Weather Emergencies**

**Committee on Hospitals  
&  
Committee on Fire and Emergency Management**

**Laura Iavicoli, MD, FACEP**

**Deputy Chief Medical Officer, Health + Hospitals/ Elmhurst**

**Senior Assistant Vice President for Emergency Management**

**NYC Health + Hospitals**

**October 27, 2021**

Good morning Chairperson Rivera, Chairperson Borelli and members of the Committee on Hospitals and the Committee on Fire and Emergency Management. I am Laura Iavicoli, Deputy Chief Medical Officer at NYC Health + Hospitals/Elmhurst and Senior Assistant Vice President for Emergency Management at New York City Health + Hospitals (Health + Hospitals). I am joined this morning by Christine Flaherty, Senior Vice President of Office of Facilities Development and Mahendranath Indar Senior Director of Office of Facilities and Development at Health + Hospitals, as well as Robert Bristol Director of Health and Medical, Christina Farrell, Acting First Deputy Commissioner, and Megan Pribram Deputy Commissioner of Planning and Resilience at New York City Emergency management (NYCEM). I am happy to testify before you to discuss NYC Hospitals Preparedness for Weather Emergencies.

Hospitals play an essential role in planning for and responding to the needs of New Yorkers during any citywide emergency, particularly weather emergencies. In recent years, health care emergency management regulatory requirements have significantly increased since major disasters such as 9/11 terrorist attacks, Hurricane Katrina and Superstorm Sandy. To ensure the safety of its patients and staff, Health + Hospitals has extensive plans in place in the event of weather, public health, or other catastrophic emergencies. Health + Hospitals' emergency operations/response

plans are developed to address “All Hazards” with specific Incident Response Annexes and Guides for high probability and high impact events which include extreme weather events such as Coastal Storms, Extreme Temperatures, and Winter and Summer weather events. Each of our sites is required to conduct training and exercises to test and evaluate their plans. Planned exercises and actual response activations are reviewed to identify gaps and areas for improvement. Emergency operations/response plans are then revised to incorporate changes and improvements identified, as well as physical improvements including hardening of facilities, purchase of needed equipment and supplies, or training for staff.

Health + Hospitals uses an Incident Command System (ICS) to manage all disasters, emergencies and other incidents. The ICS is a national best practice for coordinating emergency response and allows for communication, coordination, and collaboration with other agencies. A Central Office Incident Management Team (IMT), embedded within the System’s ICS, is responsible for coordinating emergency response across the health system. The five main components of Incident Command are Command, Operations, Planning, Logistics and Finance and Administration. Once Health + Hospitals activates the ICS, internal and external notifications are made while information is gathered for situational awareness. Staff are assigned to their incident command roles, briefings are held providing the latest intelligence and an incident

action plan is developed for the first operational period. This process repeats for each operational period throughout the activation. To facilitate coordination with our sites, regular WebEx meetings are convened with the cadence determined by the type and scope of the event, information is gathered, vetted and shared. Modes of communication used to share information with staff include Everbridge Emergency Alert System that send messages via phone, email and text message; Health + Hospitals Intranet; Outlook emails; Emergency Alerts Intranet Blog; and Alertus, the System's immediate emergency alert notification across facilities via pop-ups and ticker tape desktop messages. Once activated, the cadence of meetings within Central Office Incident Management Team and Site Leadership is established. A typical cadence of meetings would be daily morning calls with all senior Central Office leadership, chain of communication from our facilities to central office with their needs, daily System Site Leadership logistics and Planning touch bases, and broader Systemwide leadership briefings weekly. Additionally, all-staff webinars and emails are implemented to disseminate important information to all-staff. Similarly, for preparation and planning of an emergency, Health + Hospitals also utilizes the ICS. Trainings and exercises take place regularly where each facility tests components of the Emergency Operations Plan (EOP) to ensure operations and communication chains run smoothly.

Health + Hospitals has been activated in response to the COVID-19 pandemic since January 2020. During this time, we have had to concurrently respond to multiple other emergencies including coastal storms, four winter storms, mass transit shut down, extreme heat, civil unrest and staffing issues early in the COVID response. Health + Hospitals has maintained operations throughout each emergency event and provided continuity of care to our patients and communities we serve. With the evolution and implementation of ET3, Health + Hospitals has been able to care for patients who call for 911 safely from their homes during times of emergencies, via telemedicine. Although the ET3 program began during the height of the pandemic, it is also useful in times of weather emergencies. This program allows for the City to prioritize emergency services to those with more emergent needs, while re-directing lower acuity 911 calls to the appropriate level of care through additional options such as telemedicine.

However, we do not work alone. Health + Hospitals works closely with City Hall and NYC Emergency Management (NYCEM) in all phases of emergency management including planning, mitigation, response, recovery, and training and exercises. We are a part of the ESF-8 Health and Medical branch of NYCEM. If NYCEM activates their Emergency Operations Center, Health + Hospitals has a representative serve as a liaison to facilitate communications, gather and disseminate information, and request and provide resources. Additionally, Health + Hospitals sits

on several committees and work groups convened by NYCEM: ESF-8 Work Group, Citywide Logistics Committee, Shelter Planning Committee, Continuity of Operations work group, Urban Area Work Group, Coastal Storm Steering Committee, Winter Weather Steering Committee, and Heat Emergency Steering Committee. Each year, Health + Hospitals participants in exercises with other agencies and led by NYCEM. The intent of these exercises is to test plans and identify gaps however real-life activations also serve this purpose and allow for real time identification of gaps and resolution of issues. Scenarios for past NYCEM exercises include snow storms, transit disruption, nuclear attack, and coastal storms. In addition, Health + Hospitals partners with other hospital systems in NYC through the Greater New York Hospital Association (GNYHA) to prepare for emergency events. Health + Hospitals is a voting member of the NYC Health Care Coalition Governance Board led by the NYC Department of Health and Mental Hygiene (DOHMH). Health + Hospitals is a Network Healthcare Coalition and each of our acute care sites participate in borough healthcare coalitions with hospitals, nursing homes, and other community partners.

In the aftermath of Superstorm Sandy, Health + Hospitals understood the importance of recovery services. Our sites that incurred flood damage made major improvement measures including moving critical infrastructure to higher floors, flood protection

for our facilities, flood resistant infrastructure, investing in generators, electrical panels, HVAC systems, and other capital projects. Additionally, we entered into a systemwide recovery services contract, with Northstar. Northstar will assist our System in getting back to normal operations in the aftermath of a disaster including assisting with pumping flood water, repair of utilities, implementation of flood mitigation equipment, additions of generators and movement of essential equipment to higher floors to mitigate flood damage.

Most recently, during Hurricane Ida Health + Hospitals collaborated with NYCEM, DOHMH and GNYHA on a situational awareness for a post storm impacts survey. The cross regional event allowed us to query sites in real time about impacts to supplies, infrastructure, Staffing, System and Utilities ED Volume, Command Center status, medically vulnerable community members, non-patient sheltering, and other comments. It helped to inform local agencies of system status (i.e.: EMS- FDNY) and allowed for System situational awareness within NYC System and to NYC and NYS DOHMH.

Health + Hospitals is committed to keeping its patients, staff, and infrastructure safe from natural disasters. Thank you for your attention to this important topic; we are happy to answer any questions you may have.

# New York City Council

## Committee on Hospitals Committee on Fire and Emergency Management

Hearing Testimony:  
NYC Hospitals Preparedness for Weather Emergencies

Jenna Mandel-Ricci, Senior Vice President  
**GREATER NEW YORK HOSPITAL ASSOCIATION**

## **Introduction**

Chair Rivera, Chair Borelli, and members of the Committee on Hospitals and Committee on Fire and Emergency Management, my name is Jenna Mandel-Ricci. I serve as Senior Vice President for Health Care System Resilience at the Greater New York Hospital Association (GNYHA). GNYHA proudly represents all voluntary and public hospitals in New York City (NYC). Today I will discuss how hospitals across New York City plan and prepare for weather emergencies, how GNYHA supports these efforts, and how hospitals respond to emergencies.

## **Hospital Planning and Preparedness**

Hospitals' first priority is serving their communities, including preparing for all manner of emergencies so they can continue to provide care no matter the situation. While Hurricane Irene (2011) and Superstorm Sandy (2012) put emergency preparedness in the headlines, hospitals plan for emergencies well in advance. It starts with a general emergency plan—often called an Emergency Operations Plan—with indices or chapters that deal with specific hazards that the hospital is likely to encounter based on its geography or emerging threats. For example, New York City hospitals have comprehensive plans for hurricanes, but not wildfires. The Emergency Operations Plan and related indices are the blueprint for all aspects of emergency response, including the hospital's physical infrastructure and critical systems, supplies, staffing, communication, and continuity of patient care. The weather-related hazards for which New York City hospitals prepare include prolonged heat, winter storms and extreme cold, and coastal storms including the wind, rain, and surge associated with them. These plans are required by regulatory and accreditation standards set by the Centers for Medicare & Medicaid Services and The Joint Commission, respectively.

Given the impacts of previous events, including Superstorm Sandy, hospitals have worked to harden their infrastructure, prepare and train staff, and further develop processes and protocols to support patient surge into a facility and patient evacuation out of a facility. Hospitals in flood-prone areas have moved critical equipment to higher floors to ensure continuity of operations. All hospitals are required to have backup power systems, and some have even invested in distributed energy resources, usually a type of cogeneration system that allows them to generate their own power independent of the electrical grid. This infrastructure is critical to ensuring that they can continue to operate during emergencies, avoid overloading the electrical grid, and serve as areas of refuge if other parts of the City lose power.

All hospitals are required to have evacuation plans of varying levels, such as a partial evacuation plan to relocate a small number of patients to another space or a full evacuation if necessitated by an emergency event. This complex planning involves a series of steps to evaluate and ready patients for transport, pre-arrangements with other hospitals that provide similar services, processes to match and transport patients in real time, and considerations related to medical records, medication, and communication with families. Hospitals work in coordination with GNYHA and City agencies such as FDNY, NYC Emergency Management (NYCEM), and NYC Department of Health and Mental Hygiene (DOHMH) on evacuation planning and broader emergency planning. Patient evacuation planning has been a major focus for several years at the hospital and regional level, with exercises to test various parts of evacuation plans. In addition, since Hurricane Sandy there has been a focus on improving the readiness of other health care sectors for extreme weather events including primary care, dialysis, and long-term care.

### **How GNYHA Supports Hospital Planning and Preparedness**

GNYHA works closely with all New York City hospitals and multiple response agencies before, during, and after emergencies. GNYHA has a permanent seat in NYC's Emergency Operations Center (EOC) and participates in health care coordination bodies, including Emergency Support Function-8, hosted by NYCEM, and the NYC Healthcare Coalition, hosted by DOHMH. We continuously update our members on changes to agency plans, provide opportunities for emergency management leads in hospitals to share information and best practices, and lead efforts to improve regional processes. For example, after Superstorm Sandy, GNYHA and DOHMH led a workgroup to develop a regional set of standardized bed definitions to facilitate patient transfers between hospitals. GNYHA also hosts a regional information sharing and situational awareness system called Sit Stat. During extreme weather events we survey NYC hospitals about impacts using pre-developed sets of questions. This system provides all stakeholders—hospitals, health systems, GNYHA, and response agencies—with visibility on how hospitals are doing.

The morning after the remnants of Hurricane Ida impacted New York City, we quickly deployed a post-landfall coastal storm survey to all our NYC members and, within hours, determined that very few hospitals were significantly impacted. For those that were, we discerned the nature of the impacts—such as IT outages or flooding of operating rooms—and then contacted hospital leadership

to gather more details, provide assistance, and connect them to key response partners as necessary.

### **How Hospitals Respond to Emergencies**

If a weather event is forecast to impact New York City, NYCEM will host a series of citywide coordination calls that always involve a forecast from the National Weather Service. Based on the forecast NYCEM may activate a citywide plan and other resources such as the Downed Tree Taskforce or Dewatering Taskforce. NYCEM will also make decisions about activation of the EOC, the schedule, and agencies that must be present (GNYHA often participates in EOC activations). GNYHA, in turn, communicates all information about the forecast and citywide actions to its member hospitals via a special Weather Bulletin.

Hospitals, based on their own monitoring processes and information provided by GNYHA and NYCEM, may decide to activate an Incident Management Team or Hospital Command Center. The hospital will then follow internal plans and protocols to communicate situational awareness to clinical and operational leaders and make decisions as appropriate. The hospital will likely take preparatory actions such as checking generators, having extra supplies delivered, and calling in additional staff if there is concern about staff travel. During or immediately after the event, the hospital will complete surveys requested by GNYHA via its Sit Stat System and, if activated, the New York State Department of Health (DOH) via its HERDS system. Based on the emergency plan that is activated, hospitals will be instructed on which agencies to call for assistance. For example, if a hospital needs its ambulance bay plowed during a winter storm, the hospital would contact GNYHA, which would in turn make the request of the Department of Sanitation. During coastal storms, hospitals would call into the DOH Healthcare Facility Evacuation Center for assistance with patient transport.

In addition to fielding Sit Stat surveys and assisting members with specific response challenges, GNYHA may identify operational or regulatory issues among our membership and then work through them with the appropriate agencies. This may include requesting resources through NYCEM or working with DOH and DOHMH to address staffing issues.

A key issue for hospitals during winter weather events and coastal storms is the ability of staff to get to work. In situations where travel restrictions are imposed, we work with NYCEM, NYPD, and

other agencies to ensure that health care workers can travel to and from work.

### **Conclusion**

Continuous improvement is a key tenet of emergency preparedness and response. After every real event and training exercise, there is a process to determine what worked and what did not, with the goal of updating plans to address shortcomings. This process helps New York City hospitals ensure that they can fulfill their critical function no matter the weather. Thank you for the opportunity to testify on this important issue. I am happy to answer any questions you may have.