NYC’s Perspective
15 Years of PHEP and HPP

Marisa Raphael, Deputy Commissioner

New York City Department of Health and Mental Hygiene
Office of Emergency Preparedness and Response
Personal Reflections on 15 Years
Personal Reflections on 15 Years
Pre 9/11/2001

- No formal response structure
- No EOC
- Limited pool of leadership to run complex response
- Limited IT structure
- Limited capability to reach healthcare providers
- Limited response plans
- No automated syndromic surveillance
September 11, 2001
Successes – 15 Years Later

- Defined preparedness targets and tools
- Robust capabilities
- Critical partnerships forged and maintained
  - Public health role in emergency management
  - Emergency management role in public health
Defined Preparedness Targets and Tools

### Capabilities

### Tools

- Hazards Vulnerability Assessment (HVA)
- ICS tools (SitReps, IAPs, etc)

<table>
<thead>
<tr>
<th>PHEP</th>
<th>HPP</th>
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<tbody>
<tr>
<td>Community Preparedness</td>
<td>Foundation for Health Care and Medical Readiness</td>
</tr>
<tr>
<td>Community Recovery</td>
<td>Continuity of Health Care Service Delivery</td>
</tr>
<tr>
<td>Emergency Operations Coordination</td>
<td>Health Care and Medical Response Coordination</td>
</tr>
<tr>
<td>Emergency Public Information and Warning</td>
<td>Medical Surge</td>
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<tr>
<td>Fatality Management</td>
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<td>Information Sharing</td>
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<tr>
<td>Mass Care</td>
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<tr>
<td>Medical Countermeasures Dispensing</td>
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Robust Capabilities

PHEP
- Emergency Operations Coordination
- MCM Dispensing Medical Material Management & Distribution
- Lab Testing and Surv/Epi Investigation

HPP
- Healthcare System Preparedness
- Medical Surge
## Emergency Operations Coordination

<table>
<thead>
<tr>
<th>PRE 9/11/2001</th>
<th>NOW</th>
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<tbody>
<tr>
<td><strong>Operations Center and Communications</strong></td>
<td><strong>ICS structure with assigned roles</strong></td>
</tr>
<tr>
<td>☐ Response structure created in real-time</td>
<td>✓  Wireless and remote access</td>
</tr>
<tr>
<td>☐ Limited IT capability</td>
<td>✓  Emergency communications systems</td>
</tr>
<tr>
<td>☐ No ability to notify and mobilize staff</td>
<td>✓  Employee Databank (EDB)</td>
</tr>
<tr>
<td>☐ No primary or alternate Emergency Operations Center</td>
<td>✓  Redundant communications equipment</td>
</tr>
<tr>
<td>✓ ICS structure with assigned roles</td>
<td>✓  Primary and alternate Emergency Operations Center (EOC)</td>
</tr>
<tr>
<td>✓ Wireless and remote access</td>
<td>✓  Planning, training and exercises</td>
</tr>
<tr>
<td>✓ Emergency communications systems</td>
<td>✓  Operational plans (all hazard, pan flu, etc.)</td>
</tr>
<tr>
<td>✓ Employee Databank (EDB)</td>
<td>✓  Threat Response Guides for 21 scenarios</td>
</tr>
<tr>
<td>✓ Redundant communications equipment</td>
<td>✓  Quarterly ICS trainings and notification drills; semi-annual functional ICS exercises</td>
</tr>
<tr>
<td>✓ Primary and alternate Emergency Operations Center (EOC)</td>
<td>✓  Regular coordination with first responder agencies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Planning, training and exercises</strong></th>
<th><strong>Continuity of Operations</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Minimal response plans</td>
<td>✓  COOP plan updated annually</td>
</tr>
<tr>
<td>☐ No pre-event training, limited exercises</td>
<td>✓  Dedicated staff planning and response</td>
</tr>
<tr>
<td>☐ Informal relationships with first responder agencies</td>
<td>✓  Essential services/staff identified and defined</td>
</tr>
<tr>
<td>✓ Operational plans (all hazard, pan flu, etc.)</td>
<td>✓  COOP protocols, trainings, and exercises</td>
</tr>
<tr>
<td>✓ Threat Response Guides for 21 scenarios</td>
<td>✓  Regular coordination with first responder agencies</td>
</tr>
<tr>
<td>✓ Quarterly ICS trainings and notification drills; semi-annual functional ICS exercises</td>
<td>✓  Essential services/staff identified and defined</td>
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<tr>
<td>✓ Regular coordination with first responder agencies</td>
<td>✓  COOP protocols, trainings, and exercises</td>
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<table>
<thead>
<tr>
<th>✓  Continuity of Operations</th>
<th>✓  Planning, training and exercises</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ No continuity plan</td>
<td>✓  Operational plans (all hazard, pan flu, etc.)</td>
</tr>
<tr>
<td>☐ No clear identification of essential services and staff at time-of-event</td>
<td>✓  Threat Response Guides for 21 scenarios</td>
</tr>
<tr>
<td>☐ No dedicated staff or training for COOP</td>
<td>✓  Quarterly ICS trainings and notification drills; semi-annual functional ICS exercises</td>
</tr>
<tr>
<td>✓  COOP plan updated annually</td>
<td>✓  Regular coordination with first responder agencies</td>
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<td>✓  Dedicated staff planning and response</td>
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<td>✓  COOP protocols, trainings, and exercises</td>
<td>✓  Continuity of Operations</td>
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</tbody>
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11
<table>
<thead>
<tr>
<th>Pre 9/11/2001</th>
<th>NOW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Storage, Management and Distribution of MCM</strong></td>
<td></td>
</tr>
<tr>
<td>❑ Limited storage/distribution capability</td>
<td>✓ RSS capacity and robust inventory management system</td>
</tr>
<tr>
<td>❑ No inventory system</td>
<td></td>
</tr>
<tr>
<td><strong>Points of Dispensing (POD) Sites</strong></td>
<td></td>
</tr>
<tr>
<td>❑ No pre-identified POD sites</td>
<td>✓ Surveyed POD network to identify best sites (165)</td>
</tr>
<tr>
<td></td>
<td>✓ Operational site manuals</td>
</tr>
<tr>
<td></td>
<td>✓ Approval to develop Pre-Incident Action Plans for Phase 1 Operations</td>
</tr>
<tr>
<td><strong>POD Staffing</strong></td>
<td></td>
</tr>
<tr>
<td>❑ No pre-identified POD staff</td>
<td>✓ 3,000+ staff pre-trained and assigned to POD based on home address</td>
</tr>
<tr>
<td><strong>Alternate Modes of Dispensing</strong></td>
<td></td>
</tr>
<tr>
<td>❑ Plan that focused only on PODs</td>
<td>✓ Auxiliary Distribution Program (ADP)- 33 facilities, 7,229 patients, 7,809 staff</td>
</tr>
</tbody>
</table>
## Lab Testing & Surv/Epi Investigation

**Pre 9/11/2001**  
**Lab Testing Capacity**
- Processed 1-2 suspected bioterrorism environmental samples per month  
- Small Biosafety Level 2 (BSL-2) room with 2 staff  
- No electronic platform to easily share recent Epi data with our Lab

**NOW**
- BSL 3 Laboratory  
- Staff cross training for surge capacity  
- BioWatch laboratory  
- Epi and Lab Data electronically linked

**Surveillance and Epidemiology Capacity and Systems**
- 911 surveillance  
- Limited systems/integration between systems

**NOW**
- Automated ED surveillance  
- Automated prescription and over the counter (OTC) drug surveillance  
- 911 surveillance  
- School health nurse visit surveillance  
- Animal health surveillance  
- Electronic lab reporting  
- Staff depth and structure to support large investigations
NYC Healthcare System: By the Numbers

55 Hospitals
73 Adult Care Facilities
170 Nursing Homes
68 Ambulance Agencies
111 Dialysis Centers
8 Psychiatric Hospitals
7 organ transplant centers
68 Opioid Treatment Centers
1 Pediatric Disaster Coalition
12 Health Network Coalitions
17 Trauma Centers
50+ Urgent Care Centers
1 Primary Care Coalition
1 Dialysis Coalition
5 Borough Coalitions
4 NYS Designated Burn Centers
12 Health Network Coalitions
The NYC Healthcare Coalition: A Coalition of Coalitions

- PDC (Pediatric Disaster Coalition)
- PCEPN (Primary Care Emergency Preparedness Network)
- North Help (Dialysis, Methadone)
- NH Associations
- ACF Associations

- BEPC (Bronx)
- QCEPHC (Queens)
- TBC (Brooklyn)
- NYCCHRC (Manhattan)
- SI COAD (Staten Island)

- MSHS EMP (Mt. Sinai)
- MEPC (Montefiore)
- Northwell
- NYP (NY Presbyterian)
- NYUHS (New York University)
- Medysis (Jamaica, Flushing Hospitals)
- NYC H+H (Health + Hospitals)
Planning across full healthcare system

<table>
<thead>
<tr>
<th>Primary Care Emergency Preparedness Network (PCEPN)</th>
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<tbody>
<tr>
<td>• Sector readiness assessment and HVA</td>
</tr>
<tr>
<td>• Coastal storm and outbreak hazard-specific plans</td>
</tr>
<tr>
<td>• 3 TTX</td>
</tr>
<tr>
<td>• 40+ “mystery patient” drills</td>
</tr>
<tr>
<td>• Expanded membership to 400+ sites</td>
</tr>
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<table>
<thead>
<tr>
<th>Pediatric Disaster Coalition</th>
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<tbody>
<tr>
<td>• Completed Pediatric ICU and General Pediatrics surge plans with 28 hospitals</td>
</tr>
<tr>
<td>• Two multi-hospital functional exercises</td>
</tr>
<tr>
<td>• 9 Neonatal ICU and 4 Labor/Delivery surge and evacuation plans 24 PICU surge capacity plans</td>
</tr>
<tr>
<td>• Pediatric surge/evacuation planning and exercise template</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Long Term Care Program</th>
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<tr>
<td>• Began in 2013 with pilot of 19 nursing homes</td>
</tr>
<tr>
<td>• Program 1: Emergency Management Principles</td>
</tr>
<tr>
<td>• 153 have completed</td>
</tr>
<tr>
<td>• Program 2: Exercise Design</td>
</tr>
<tr>
<td>• 73 have completed</td>
</tr>
<tr>
<td>• Program 3: Continuity of operations</td>
</tr>
<tr>
<td>• 19 have completed</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Dialysis Center Preparedness</th>
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<tbody>
<tr>
<td>• HVA and Emergency Operation Plan template for dialysis centers and Opioid Treatment Programs (OTP)</td>
</tr>
<tr>
<td>• Dialysis patient preparedness guidance DVD available in 6 languages</td>
</tr>
<tr>
<td>• Trained Medical Reserve Corps volunteers to deliver in person training in preparedness for dialysis patients and OTP patients</td>
</tr>
</tbody>
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Critical partnerships forged and maintained

**Government Agencies**
- NYC Emergency Management
- CDC
- New York State Department of Health
- ASPR
- Fire Department City of New York
- Police Department City of New York

**Healthcare System**
- Greater New York Hospital Association
- Primary Care Emergency Preparedness Network
- NYC Pediatric Disaster Coalition
- NYC Health + Hospitals

**Community Orgs**
- NYDIS
- HSC Human Services Council
Critical partnerships forged and maintained

- Public health at the table for planning and exercises
- Public health expected to be part of or lead response
- Public health agencies expected to always be ready
“My tenure as commissioner has been dominated by microbes... whether it was Ebola, Legionnaires’ disease, or Zika”

Dr. Mary Bassett, Commissioner of Health
Public health role in emergency management is now recognized, appreciated and depended on.

**Public Health Led Response**

- **Ebola 2014**
  - Public health led extensive interagency coordination with more than 25 city, state and federal agencies.

- **Zika 2016**
  - Public health led comprehensive proactive planning efforts focused on travel related cases.

**Public Health as Key Partner**

- **Sandy 2012**
  - Public health provided key support, including: healthcare evacuations, patient tracking, primary care services, shelter operations and surveillance, door-to-door canvassing, and community outreach and information.

- **Steam Pipe Explosion 2007**
  - Provided key support including: environmental assessments, environmental sampling and testing; clean up; and community outreach.
Emergency management role in public health is now recognized, appreciated and depended on.

**DOHMH Staff**
- All DOHMH staff assigned emergency role via Employee Database
- Emergency preparedness part of tasks and standards for all staff

**ICS Leadership**
- All ICS leadership staffed 5-8 deep with on-call schedule
- All ICS leadership required to attend quarterly scenario-based training and bi-annual functional exercise
- 90% of ICS responders feel adequately trained for their response role
- 92% clearly understand responsibilities of their roles
NYC Health
ICS Activations since 2007

DOHMH activated 20 times since 2007

Days activated since 2007
- June 2007
- June 2010
- June 2013
- June 2016

759
Longest number of days DOHMH was continuously activated

32%
Percent of time DOHMH has been activated since 2007
Challenges

- Emergencies are increasing in frequency and complexity
  - Increase in terrorist events worldwide
  - Climate change
  - Globalization

- Resources continue to decline

- Lack acceptable system to fund public health responses

- Difficult to measure impact of our work
WHY?

Public Health
Call to Action

- Participate in the PHEP Impact Project
  - Engage your elected officials
- Partner with the media to educate them on public health preparedness and response
- Develop metrics that quantify value and impact of work
Public Health Emergency Preparedness (PHEP) Program

Protecting America’s health, safety, and security to save lives.

The PHEP Program allows our nation to invest in the people, plans, training, and equipment needed to effectively respond to emerging public health threats.

A Lifesaving Investment

The PHEP Program, managed by the Division of State and Local Preparedness (DSLBP) within the Centers for Disease Control and Prevention, allows our nation to invest in the critical public health resources that contribute to our overall national security. State and local public health departments are uniquely positioned as the first line of defense—serving as responders, outbreak investigators, and agents of recovery. Investing in public health preparedness before an emergency occurs saves lives.

The Challenge

Since 9/11, critical federal preparedness funding has declined by 42%. Cuts to PHEP Program funding have forced PHEP Program grantees to cut specialized positions, staff trainings, and exercises, and equipment. A lack of continued, stable, and adequate funding clearly diminishes state and local public health department capacity to prepare for and respond to emerging threats in the communities they serve.

Improvements in Public Health Preparedness Since 9/11

<table>
<thead>
<tr>
<th>PHEP Awardees Who:</th>
<th>Then</th>
<th>Now</th>
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<tbody>
<tr>
<td>Can receive staff during an emergency</td>
<td>20%</td>
<td>98%</td>
</tr>
<tr>
<td>Have an Incident Command System with pre-assigned roles in place</td>
<td>5%</td>
<td>100%</td>
</tr>
<tr>
<td>Include collaboration with local health agencies in their preparedness plans</td>
<td>8%</td>
<td>92%</td>
</tr>
<tr>
<td>Have sufficient storage and distribution capacity for critical medicines and supplies</td>
<td>0%</td>
<td>98%</td>
</tr>
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The Opportunity

The time is now to renew the federal commitment to the state and local public health departments responsible for safeguarding the public’s health. PHEP Program funding must be maintained to continue delivering our nation’s health security.


Stories from the Field

2012 Hurricane Sandy

Situation
On October 29, 2012, Hurricane Sandy hit New York City (NYC) with a force unimagined by any coastal storm in New York City. Forty-three New Yorkers lost their lives and tens of thousands were injured, temporarily displaced, or permanently displaced by the storm’s impact.

Intervention
In the aftermath of Hurricane Sandy, PHEP Program funding allowed NYC to build a robust, centralized coordination system that helped residents and first responders by using the system, and activating the system during an emergency.

Impact
The PHEP Program supports ongoing work with multiple hurricane partners to integrate existing plans and protocols with the coordination system, train first responders how to use the system, and activate the system during an emergency.

The PHEP Program in Action

Key responses that saved lives due to PHEP Program support:
- 2016 – 2017 - Zika Virus
- 2015 – Legionnaire’s Disease
- 2015 – Hurricane Irene
- 2017 – Steam Pipe Explosion
- 2016-17 – Ebola Virus Disease
- 2018 – H1N1 Flu

Critical Needs

The PHEP Program supports the following public health and safety functions that are jeopardized when funding is cut.

Blowout Surveillance
Automated systems need to be maintained and upgraded to support effective and timely disease surveillance.

Community Resilience
New York’s city and its 400+ primary care providers, roughly 117 community health centers, and approximately 2,400 pharmacies in critical services and support. Without the development of effective resources, these openings will be closed – putting the health of local residents at risk.

Countermmeasures & Mitigation
National funding is needed to support comprehensive efforts to protect and continuously improve public health preparedness and response in NYC. Plans and strategies with $100,000 to support 40 hours of medical response training.

Information Management
Maintaining a permanent state of readiness and surge capacity is essential to respond to any emergency. A reduction in funding would result in inability to maintain this state of readiness and impact our ability to quickly activate preparedness plans and mobilize our incident response staff.

Incident Management
Volunteers conduct research, perform exercises, and ensure that tools are available regardless of the size of an incident. But without ongoing training and support, these programs cannot function effectively.

Surge Management
The PHEP Program strengthens the ability of our nation’s communities to prepare for, withstand, and recover from public health threats, saving lives. 24/7/365.
New York City Health Care System Preparedness Annual Report

July 2015 to June 2016

New York City Department of Health and Mental Hygiene
Office of Emergency Preparedness and Response
With Persistence and Phone Calls, Defending Against Ebola in New York

By ANEMONA HARTOCOLLIS  NOV. 11, 2014

On the 12th floor of a glass tower at the city health department’s headquarters in Long Island City, Queens, workers huddle like telemarketers at banks of 30 computers, doggedly calling one telephone number after another.

Darryl Wong, a French-speaking operator, was trying to reach a West African man who had left New York several days before and had not returned when he said he would.

“All, bon,” Mr. Wong said patiently to the man’s wife, who answered their phone in the Bronx. “Il est toujours à Maryland.” He wheedled a Maryland number out of the woman, and began calling it.

New York City’s defense against the Ebola epidemic — and at least the hypothetical threat that it will percolate through the city’s mass transit system, schools and dense neighborhoods — is this 24-hour-a-day operation now keeping track of almost 300 people, believed to be the largest monitoring effort in the country.
Key Points for Policymakers

- Public health is critical to response
  - Like other first responder agencies, we are a key government player
- Resources must continue so we can sustain and build
- Cost effective
  - If not handled at local level, increase in costs for feds
  - State and local contributions are significant
- Building national capability
  - Example: EMAC deployments
- Without HPP, the naturally competitive healthcare system will not work together
  - Role critical to building synergy within and across sectors to address system wide gaps
Thank You!

Marisa Raphael, MPH
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NYC Department of Health and Mental Hygiene (DOHMH)
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