



How the BEPC Supports Healthcare Facilities in Preparedness and Response

A review of the Bronx Emergency Preparedness Coalition's strategies for
Mutual Aid and Communication Plans

Presented by Ryan Fraleigh

CHALLENGES OF WORKING TOGETHER



JOB

BEPC







ADDRESSING THE CHALLENGES

Success →

is in the Follow Up!







DISASTER RESOURCE
DIRECTORY (DRD)

THE BRONX EMERGENCY PREPAREDNESS COALITION

FACILITY	COMMAND CENTER TELEPHONE #*		# OF BEDS/REDS TO ACCOMMODATE MASS CASUALTY PATIENTS		# OF NEGATIVE PRESSURE ROOMS	ALTERNATE CARE SITES FOR WORRIED WELL PATIENTS		PORTABLE RADIOS			OEM RADIO	# OF VEHICLES		# OF VENTILATORS		# OF STRETCHERS	# OF WHEELCHAIRS	# OF PORTABLE CARDIAC MONITORS	# OF PORTABLE PULSE OXIMETERS	DECON UNIT		PPE	ED TELEPHONE #	MORGUE CAPACITY	PEDIATRIC SERVICE	NEONATAL SERVICE
			TYPE	NUMBER		LOCATION	NUMBER	TYPE	OPEN CHANNEL	FREQUENCY		TYPE	# OF PASSENGERS	AE D	PE D					PORTABLE	STATIONARY					
Jacobi Medical Center	718-318-5833		Med Surg	C 538 UTIL 495 (43)	6 21 Potential Rooms	1ST FL NURSES RESIDENCE	100	UH F	Operations Channel 1	468.200 PL167.3/6 a RX 463.200 PL167.3/6 a TX/RX46 3.200/6a	YES	4 Veh 2 Veh 10 Veh	6 Wlch Ea 2 Stre Ea 10 Ea	41	26	115	21	13	50	2	N/A	162	A918-5800 P918-5875	10-40	Yes	Yes
North Central Bronx 49th Precinct 52nd Precinct	718-519-3484 718-318-2004 /14/16/25 718-220-5841 718-220-5811		Med Surg	30	22+	17FL Dining Area	100	UH F	24	464.3750 0 TRANS 469.3750	YES	1 Malibu	4 ea	14	4 NEO	32	10	8	24	2	N/A	54	A519-3013 P519-3015	6	No	Yes
Bronx Veterans Affairs Medical Center	718-584-9000 Ext 3750,3794, 3757,3735		Med Surg Psych	95MS 20 CC 30MH	19	Rm 3D-22	100	UH F VH F	UHF Facility Mgmt (35) VHF VA Police (35)	408.625 Rec 417.625 VHF 166.675	On Order	13 Sedan 1 Stat/wgn 7MiniVan 2ClubVan 7 LqVans	4ea 5ea 6ea 7ea 14ea		42	N/A	103	65		1	1 Planned	24+	584-9000 ext 5255/5256	16	Limited	N/A
Bronx Psychiatric Center	718-824-2266		PSYCH	100	0	Transitional Residence	100	UH F	SAFETY CHANNELS	155.0700	No		15 ea	12 ea	N/A	N/A	N/A	N/A		No	No	No	N/A	N/A	No	No
Calvary Hospital	Brd Room 718-518-2252 COO 718-518-2247		Acute Care		8	N/A	N/A	17 UH F	11 (5, 7-16)	154.5700	No	2 Subur 2 Blar 1 Amb/let	06 ea 04 ea 3 W/LCH	0	0	4	3	1	2	No	No	No	N/A	16	No	No
Empress Ambulance	(888) 965-5040		N/A	N/A	N/A	N/A	N/A	UH F	2 OPEN	467.950	No	15 BLS 5 ALS	30 Patients Combination of Ambulatory /Non-Ambulatory	5 Dual Purpose Adults & Peds						To Be Purchased	No	30	918-7999	N/A	Yes	No
Kings Harbor Multicare Center	718-320-0400 Booper 917-869-0100		Ward Beds	100	N/A	Remed GYM	40	UH F		461.4875 Rcv 466.4875 Trans	No	4 Vans 1 Bus	6 ea 16 ea	0	0	6	400	N/A (3 Defib)	4	No	No	No	See Command Center #	5	No	No



File Home Insert Page Layout Formulas Data Review View ACROBAT Tell me what you want to do... Fraleigh, Ryan Share

Cut Copy Paste Format Painter Clipboard

Arial 10 Font Wrap Text Merge & Center Alignment

Text Number \$ % .00 .00 Conditional Formatting Format as Table Styles Normal 2 Normal Bad Good

Insert Delete Format Cells AutoSum Fill Clear Sort & Find & Filter Select Editing

		Bed Capacity																				Sum	
Facility	Quantity Catego	Adult Acut Reha	Adult ICU	Adult Med Surg	Adult Psyc	AIIR Roof	Bariatric	Coma Recover	Healthy Newbo Isolett	Infant / Cribs	L & D	NICU	Non Traditional Surge Be	Peds Acute Rehab	Peds ICU	Peds Med Surg	Peds Psyc	Post Deliv	TBI Acute Care	Ventilator Access	Morg	Other	
Accent Care of New York	Capacity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Accent Care of New York	Available	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ambulatory Surgery Center of Greater New York, LLC	Capacity	0	0	2	0	0	0	6	0	0	0	0	10	0	0	0	0	0	0	0	0	0	18
Ambulatory Surgery Center of Greater New York, LLC	Available	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AMSC, LLC Downtown Bronx ASC	Capacity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AMSC, LLC Downtown Bronx ASC	Available	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BronxCare Health System	Capacity	25	21	325	167	15	0	0	23	20	9	25	15	0	5	20	25	18	0	73	15	0	801
BronxCare Health System	Available	2	5	20	0	2	0	0	10	2	3	10	15	0	2	4	6	3	0	0	2	0	86
BronxWorks	Capacity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BronxWorks	Available	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Calvary Hospital	Capacity	0	0	200	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0	232
Calvary Hospital	Available	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DOHMH	Capacity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DOHMH	Available	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Empress Ambulance Services	Capacity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Empress Ambulance Services	Available	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jacobi Medical Center	Capacity	18	36	148	42	159	4	16	35	28	22	25	200	0	8	31	48	20	12	350	20	8	1230
Jacobi Medical Center	Available	7	3	22	18	19	1	11	20	10	7	7	200	0	2	10	12	10	5	350	7	4	725
James J. Peters VAMC	Capacity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James J. Peters VAMC	Available	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kings Harbor (SNF)	Capacity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	50
Kings Harbor (SNF)	Available	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lincoln Medical Center	Capacity	0	30	137	60	16	0	0	31	35	14	20	0	0	8	24	0	7	0	0	15	40	437
Lincoln Medical Center	Census	0	26	135	43	16	0	0	16	10	7	11	0	0	7	8	0	3	0	0	0	10	292
Montefiore - Moses incl CHAM	Capacity	0	60	598	22	0	0	0	0	0	0	0	0	0	26	136	0	0	0	0	0	0	842
Montefiore - Moses incl CHAM	Available	0	4	12	0	0	0	0	0	0	0	0	0	0	26	136	0	0	0	0	0	0	178
Montefiore - Einstein	Capacity	0	32	304	0	0	0	0	15	0	50	35	0	0	0	0	0	0	0	0	0	0	436
Montefiore - Einstein	Available	0	4	7	0	0	0	0	15	0	30	5	0	0	0	0	0	0	0	0	0	0	61
Montefiore Wakefield	Capacity	16	16	325	33	0	0	0	3	0	20	22	0	0	0	0	0	27	0	0	0	0	462
Montefiore Wakefield	Available	5	5	147	0	0	0	0	2	0	16	10	0	0	0	0	0	7	0	0	0	0	192
North Central Bronx Hospital	Capacity	0	18	72	70	22	0	0	26	0	7	12	0	0	0	0	0	14	0	18	6	0	265
North Central Bronx Hospital	Available	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Hospital with an issue is in red

CALL DOWN DRILL



*****This is just an Exercise!!!!*****

Early this morning, Lincoln Hospital experienced an explosion in its 3rd floor mechanical floor. 4 Staff were injured. All generators, and various equipment and medical devices have been damaged. Furthermore due to a reoccurrence of the flu affecting the other 4 boroughs the H+H System will not be able to accommodate all the patients or provide sufficient resources to address the event.

@ 09:47 time Ryan Fraleigh Emergency Management Director of Lincoln Hospital sent an SOS via GroupMe.
(GroupMe) Communication 1

This is just an Exercise!!!!

Major Explosion at Lincoln Hospital need resources, immediately, total evacuation possible!!

SIGNIFICANT EVENTS LOG: Please provide information on any significant events.	
Time	Event/Action
09:45	Exercise begins Explosion in NYC H+H Lincoln
09:47	GroupMe message sent
09:56	Everbridge Message sent
~10:15	2 nd Everbridge message sent
12:00	Exercise Ends



B,E,P,C, Notification

ID: 8101205968485951

CLOSED

Opened On: 2018-04-06 09:55:31 EDT - by Michael Moculski
Last Updated On: 2018-04-06 11:58:34 EDT - by Michael Moculski
Closed On: 2018-04-06 11:58:34 EDT - by Michael Moculski

Notification: 2018-04-06 09:55:32 EDT

Title	ID	Phase	Sent By	Incident Template	Confirmed	Not Confirmed	Unreachable
B,E,P,C, Notification	8101205968706576	New	Michael Moculski	BEPC Notification	28	8	0

Message (Customized Email below)

This is an Exercise! Lincoln hospital has had a catastrophic event! Please check your email for further information. Authority of the Bronx Emergency Preparedness Coalition, This is an Exercise!

Confirmed	Contact Name	Attempt #	Attempt Time	Delivery Method	Method	Result	Group/Filter
Not Confirmed	[REDACTED]	1	2018-04-06 09:55:48 EDT	--	Work E-mail	Sent	BEPC
Not Confirmed	[REDACTED]	2	2018-04-06 09:57:47 EDT	--	Text to Cell	Sent	BEPC
Not Confirmed	[REDACTED]	3	2018-04-06 09:59:46 EDT	--	Cell Phone	Delivered - To Voicemail	BEPC
Not Confirmed	[REDACTED]	4	2018-04-06 10:01:45 EDT	--	Office Phone	Delivered	BEPC
Confirmed	[REDACTED]	5	2018-04-06 10:06:46 EDT	--	Work E-mail	Confirmed	BEPC
Not Confirmed	[REDACTED]	6	2018-04-06 10:08:46 EDT	--	Text to Cell	Sent	BEPC
Not Confirmed	[REDACTED]	7	2018-04-06 10:10:45 EDT	--	Cell Phone	Delivered - To Voicemail	BEPC
Not Confirmed	[REDACTED]	8	2018-04-06 10:12:45 EDT	--	Office Phone	Delivered - To Voicemail	BEPC
Not Confirmed	[REDACTED]	1	2018-04-06 09:55:47 EDT	--	Work E-mail	Sent	BEPC
Not Confirmed	[REDACTED]	2	2018-04-06 09:57:46 EDT	--	Text to Cell	Sent	BEPC
Not Confirmed	[REDACTED]	3	2018-04-06 09:59:47 EDT	--	Cell Phone	Delivered	BEPC
Not Confirmed	[REDACTED]	4	2018-04-06 10:01:46 EDT	--	Office Phone	Delivered - To Voicemail	BEPC





Creating the Appropriate ICS Structure for Your Healthcare Coalition

Willie K. Carley, NY/NJ Veterans Integrated Service Network 2 (VISN 2),
Network Emergency Manager

Bronx Emergency Preparedness Coalition-Department of Health and Mental Hygiene

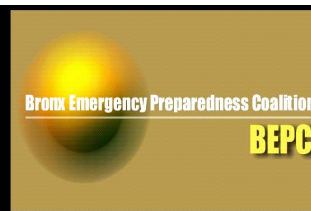
Creating the Appropriate ICS Structure for Your Healthcare Coalition



VA HEALTH CARE
Defining **EXCELLENCE**
in the 21st Century

Willie K. Carley PhD, MS VHA –CM
VISN 3 Bronx, New York

William Lang MS
New York City Department of Health & Mental Hygiene



Introduction

Incident Management is the capability to effectively direct and manage incident activities by using the Incident Command System (ICS) consistent with the National Incident Management System (NIMS).

This case study introduced a real-world methodology developed for the Bronx Emergency Preparedness Coalition (BEPC) Table Top Exercise; to systematically develop an Incident Command System for their healthcare coalition to guide their future practice.

Study Population

The potential participants for this study are (N=492) healthcare coalitions registered with the U. S. Department of Health and Human Services.

Sample Population

To narrow the sample from (N=492) healthcare coalitions to a sample population of (n=22) potential participants, convenience sampling will be used.

Collection Procedure

For this case study a table top exercise was used to explore the perspectives of the Bronx Emergency Preparedness Coalition healthcare coalition to answer the study's research questions

¹What are the required constructs of an Incident Command System for a healthcare coalition? ²How are Healthcare Coalitions Incident Command Systems Developed? (a) table top exercise, (b) secondary data such as documents, after action reports, literature provided by the participant and (c) field notes to obtain rich research data.

Problem Statement

There is little theoretical research on how to systematically develop an Incident Command System for a healthcare coalition.

Purpose of the Study

The purpose of this study is to identify how to systematically develop an Incident Command System for a healthcare coalition to guide their future practice.

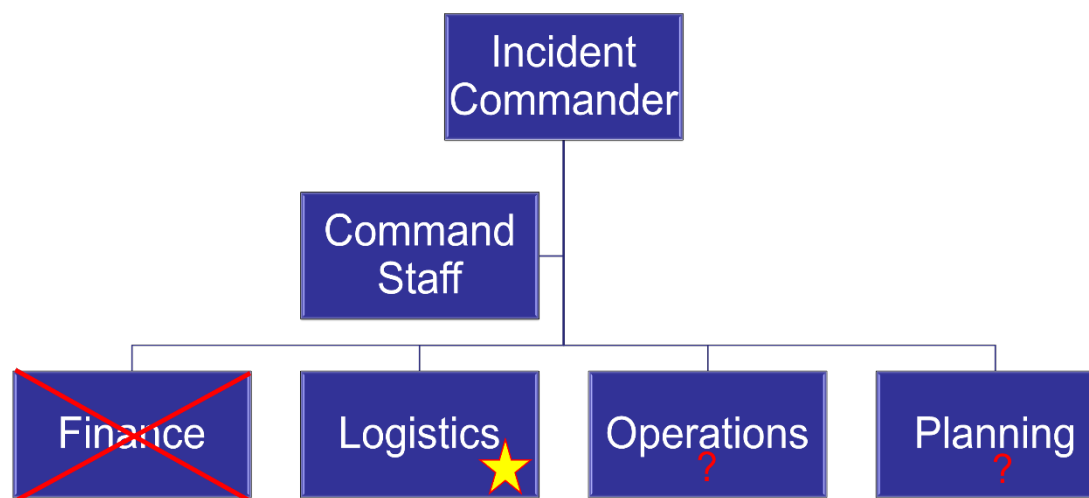
Research Questions

¹What are the required constructs of an Incident Command System for a healthcare coalition?

²How are Healthcare Coalitions Incident Command Systems Developed?

Conclusion

1. The Lead Facility will be the coordinating facility for the BEPC.
2. It was determined by the BEPC Chartered members that the BEPC is not expected to provide financial assistance.
3. The BEPC members identified as the primary role of the BEPC was to provide logistical (Human & Materiel) support.
4. The BEPC were not able to come to an agreement on the role of the BEPC as a collective unit serving "operations and planning".
5. To be further discussed. The BEPC TTX successfully provided participants with an opportunity to explore their current plans, roles and responsibilities in the event the BEPC was needed within their community.
6. While several areas for improvement were identified, the overall play demonstrated that the basic plan is viable and the BEPC is prepared to support one another as needed.



Data Analysis

The initial steps for this qualitative case study consisted of the researcher developing a list of codes from the literature review. Once data from the (a) semi structured interviews, (b) secondary data, such as documents, after action reports, and literature provided by the participant (c) self-developed interview questionnaire, and (d) field notes are collected, the initial codes were compared and revised against the actual data (Corbin & Strauss, 2008).

Method

A Case Study was the overarching methodology selected to identify a process for the Bronx Emergency Preparedness Coalition to develop their Incident Command System. The goal of the exercise was not to determine [if] the BEPC needed an Incident Command System; but to identify and examine the process required to systematically develop their Incident Command System to guide their future practice.

Reference

- Corbin, J., & Strauss, A. (2008) *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Thousand Oaks, CA: Sage.
- Creswell, J. (2007). *Research design: Qualitative, Inquiry, and Research Design. Choosing Among Five Approaches* Thousand Oaks, CA: Sage.
- Creswell, J. (2009). *Research design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks, CA: Sage.
- Dabarati Guha-Sapir, Hoyis, & Below. (2014). Center for research on the epidemiology of Disasters. *Annual Disaster Statistical Review 2013 the numbers and trends*. Retrieved from http://cred.be/download/download.php?file=sites/default/files/ADSR_2013.pdf
- Merriam, S. (2009). *Qualitative Research. A Guide to Design and Implementation. Revised and Expanded from Qualitative Research and Case Study Applications in Education*. San Francisco, California: Jossey-Bass.
- U.S. Department of Homeland Security. *National incident management system* (2008). Retrieved from http://www.fema.gov/pdf/emergency/nims/NIMS_core.pdf
- U.S. Department of Homeland Security. *National response framework* (2008). Retrieved from <http://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf>



Breakout Session: What is a Borough Coalition's Role in Response?



Networking Break

ASPR & National Healthcare Coalition Preparedness Conference Updates

Celia Quinn, Executive Director, Bureau of Healthcare System
Readiness, NYC DOHMH

GNYHA Update - MCI Naming Conventions

Jenna Mandel-Ricci, Vice President, Regulatory and Professional Affairs, GNYHA

Regional Guidance: Naming Conventions and Associated Protocols for Unidentified Patients during a MCI Response

December 20, 2018

GREATER NEW YORK HOSPITAL ASSOCIATION

Over 100 years of helping hospitals deliver the finest patient care in the most cost-effective way.

Project Genesis: Fact-Finding Delegation Visit to Las Vegas, February 1-2, 2018

- Purpose: Learn about Las Vegas' response to the October 1st mass shooting
 - Organized in collaboration with the Nevada Hospital Association
- Who participated:
 - Nine NYS health systems
 - Government response agencies including: FDNY, NYPD, OCME, DOHMH, NYCEM, NTSB, Department of State Diplomatic Services
 - Three Las Vegas hospitals, Las Vegas police and fire agencies, community ambulance companies, Public Health District, Nevada Hospital Association

Identified Gap:

Disaster Registration, including Unidentified Patients

- Sunrise Hospital and Medical Center, the Las Vegas–area hospital that received the largest number of patients, treated 92 individuals who arrived with no identification.
 - The volume of unidentified patients quickly overwhelmed their existing naming convention procedures.
 - At a jurisdictional level, it was difficult for the public health authority to compile and track unidentified patients hampering family reunification.
- In follow up call after the delegation visit, the group identified this area as one of concern.

Project Objectives

- **Facility Level:** Improve/enhance existing disaster registration protocols to support both clinical care and family reunification.
- **Jurisdiction Level:** For events that may result in many unidentified patients across multiple hospitals, facilitate the creation of a jurisdiction-wide manifest.

Regional Guidance: Naming Conventions and Associated Protocols for Unidentified Patients during a MCI Response

- Disseminated to all GNYHA members on November 6th
- Includes guidance + accompanying tool with suggested first and last names for every GNYHA member
- Members asked to voluntarily implement guidance by March 31, 2019



**HOSPITAL ABBREVIATIONS AND ITEMS IN SUPPORT
OF REGIONAL UNIDENTIFIED PATIENT NAMING CONVENTION**

This tool provides a regional naming convention and associated protocols for identifying, tracking, and caring for unidentified patients during a mass casualty incident (MCI) response. The table below contains naming convention guidance, including for first and last names and estimated age. There is also information for incorporation of identifying features into the patient record, and a tag to associate victims of the same incident. In addition, the guidance offers a target time period for patient registration.

PATIENT VARIABLE	NAMING CONVENTION
Last Name	<ul style="list-style-type: none"> Abbreviation of hospital name + digit (beginning with "1") Example for General Hospital: GenHosp1, GenH Please see below for suggested hospital abbrevi
First Name	<ul style="list-style-type: none"> Each hospital has been assigned an item; please encouraged to develop additional names within Example: Assigned Item – Flowers Name list: Begonia, Daffodil, Lily, Rose, Lilac, Da
Estimated Age	1/1/estimated year of birth (based on hospital staff c
Gender	Indicate "male," "female," or "unknown"

ADDITIONAL VARIABLES	NAMING CONVENTION
If the Patient is a Minor	Indicate in the medical record whether the patient capture the individual's contact information.
Identifying Physical Features	Ensure there is a place on registration documentati usual features or markings, and their location, which
Accompanying Items	List any items that the person may have had with the Include it with the medical record. Include "in case c
Photo	Take a picture of each patient and upload it to the E

GNYHA
EMERGENCY
PREPAREDNESS BULLETIN

FROM:
Jenna Mandel-Ricci
Vice President, Regulatory and
Professional Affairs

Regional Guidance: Naming Conventions and Associated Protocols for Unidentified Patients during a MCI Response

GNYHA offers the attached guidance to member hospitals and health systems about naming conventions and associated protocols for identifying, tracking, and caring for unidentified patients during a mass casualty incident (MCI) response. This guidance was collaboratively developed by hospital representatives involved in mass casualty response planning, and government agency representatives. It is designed to support clinical care and family reunification at the facility level, while enabling broader citywide or regional manifests to be created for incidents that result in large numbers of unidentified patients across multiple hospitals.

While implementation of this guidance is voluntary, GNYHA urges all member hospitals to bring together a multidisciplinary team to review and consider integration with current protocols and practices. The multidisciplinary team should involve the following departments at a minimum: Emergency Department, Patient Registration, Trauma, Radiology, Laboratory, Critical Care, Nursing, Social Work, Child Life, Perioperative, and Public Affairs. *Hospitals are encouraged to implement these protocols using the suggested first and last names found in the accompanying tool, with implementation complete by March 31, 2019.* To track implementation, all participating hospitals are asked to e-mail a copy of their *Mass Casualty Incident Registration Policy* to [me](#). If you have any questions or

Regional Guidance for Registration of Unidentified Patients

This tool provides a regional naming convention and associated protocols for identifying, tracking, and caring for unidentified patients during a mass casualty incident (MCI) response. The table contains naming convention guidance, including for first and last names and estimated age. There is also information for incorporation of identifying features into the patient record, and a tag to associate victims of the same incident. In addition, the guidance offers a target time period for patient registration.

PATIENT VARIABLE
Last Name
First Name
Estimated Age
Gender

ADDITIONAL VARIABLES
If the Patient is a Minor
Identifying Physical Features
Accompanying Items
Photo

ADDITIONAL VARIABLES
Disaster Tag
Reconciled Last Name, First Name

TARGET TIME PERIOD FOR ELECTRONIC REGISTRATION

Within 20 Minutes

While patient care takes precedent, hospitals should develop and exercise disaster registration protocols so that patients, including unidentified patients, can be quickly registered. Registering patients within this timeframe directly supports broader patient tracking and family reunification efforts.

Suggested First and Last Name for All GNYHA Member Hospitals

HOSPITAL NAME	HOSPITAL ABBREVIATION FOR LAST NAME	ASSIGNED HOSPITAL ITEM FOR FIRST NAME	EXAMPLE FIRST NAMES
Albany Medical Center	AlbMed1	Birds	albatross, blackbird, bluebird, booby, crane, crow, cuckoo, dove, duck, eagle, emu, falcon, finch, flamingo, goose, guan, gull, hawk, heron, hornbill, hummingbird, ibis, jay, kingfisher, lark, mockingbird, motmot, oriole, osprey, ostrich, owl, parrot, pelican, penguin, petrel, pigeon, quail, robin, sparrow, starling, stork, swallow, swan, thrush, tinamou, toucan, turkey, warbler, woodpecker, wren

Principles underlying suggested first and last names:

- All unidentified patients will be associated via the last name with the originating hospital, even if transferred
- All hospitals have been provided with a suggested item for first name and 50 “names” within that item
- While first names items are repeated, each hospital within a health system has a unique first name item; geographically close hospitals also have been assigned distinct first name items

Questions? Suggestions?

Jenna Mandel-Ricci

Vice President, Regulatory and Professional Affairs

Greater New York Hospital Association

Phone: 212.258-5314

Email: jmandel-ricci@gnyha.org



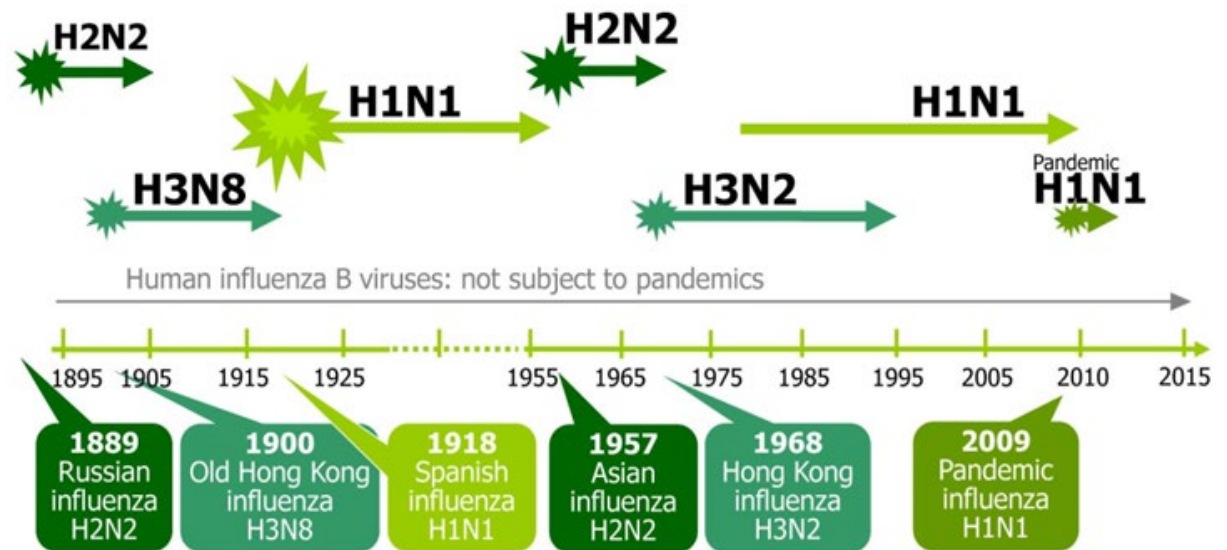
Pandemic Influenza

LEADERSHIP COUNCIL (LC) MEETING, DECEMBER 20, 2018

Jessica Cole, MA
Office Of Emergency Preparedness And Response (OEPR), DOHMH

What is Pandemic Influenza?

- ▶ A pandemic is a global disease outbreak
- ▶ An influenza pandemic occurs when a new influenza A virus emerges for which there is little or no immunity in the human population, begins to cause serious illness and then spreads easily person-to-person worldwide





Seasonal vs Pandemic Impacts

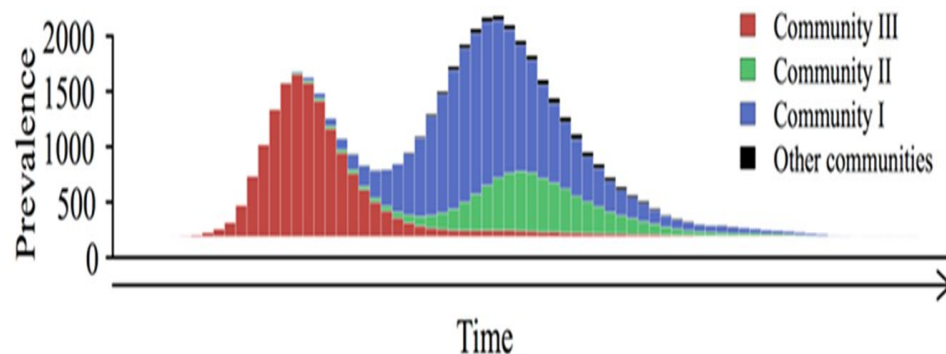
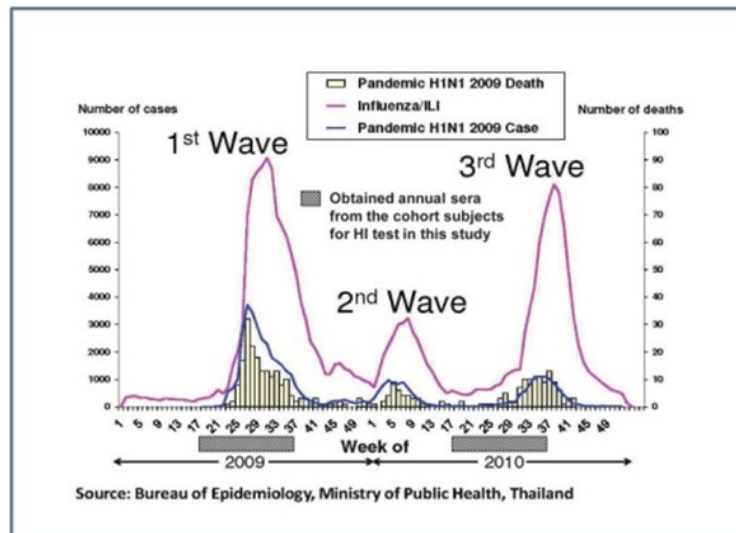
Seasonal:

- ▶ Impacts can vary year to year
- ▶ Annual strain-specific vaccines available
- ▶ Generally the ‘very young and the very old’ most at risk
 - Highest rates of hospitalization among young children and persons ≥ 65 years of age
 - 90% of deaths among persons ≥ 65 yrs
- ▶ 3,300 to 49,000 deaths per year across the country
- ▶ > 225,000 excess hospitalizations nationwide

Pandemic:

- ▶ Unknown who the most at risk will be
- ▶ NO vaccine for first few months!
- ▶ Mild/ Moderate
 - Attack rate between 5-20%; 0.4 - 1.6 million estimated to be infected
 - Case fatality rate (CFR) < 0.1%;
 - Impact can be similar to seasonal flu, but may be ‘worse’
- ▶ Severe
 - Attack rate between 20-25%
 - CFR approximately 2%+
 - 50% of infected require outpatient care and 11% of those require hospitalization

Pandemics Have Different Characteristics

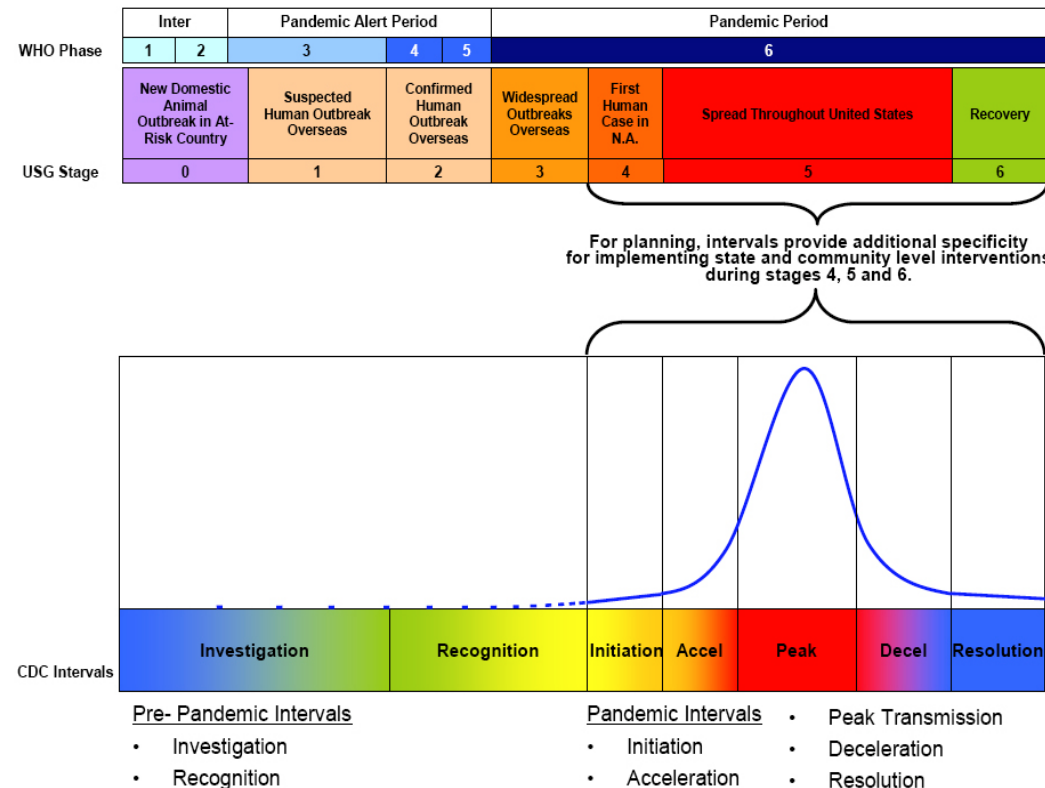


- ▶ Occurs in waves (approximately 3, 8-12 weeks each)
- ▶ Attack rate of up to 40% in school-aged children and 20% in working adults
- ▶ Fatality rate of up to 2% in infected
- ▶ Impact can be similar to seasonal flu, but may be 'worse'
- ▶ No all locations will experience the same effects at the same time

Pandemic Intervals

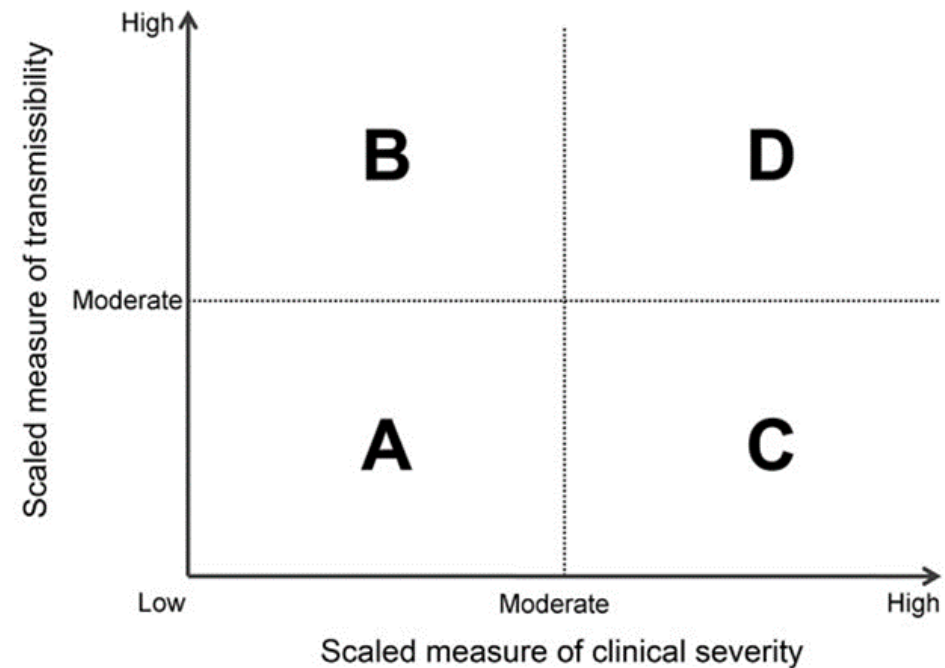
- Based on WHO/ CDC guidance
- Phased event (per wave):
 - Recognition
 - We are always at this level
 - Initiation
 - Acceleration
 - Peak Transmission
 - Deceleration

Figure 2: Periods, Phases, Stages, and Intervals



CDC Pandemic Severity Assessment Framework (PSAF)

- ▶ **Clinical severity** – how serious is illness associated with infection?
- ▶ **Transmissibility** – how easily does virus spread from person to person?
- ▶ **Conceptual framework for assessment of the effects of an influenza pandemic**
 - Clinical severity X-axis
 - Transmissibility Y-axis
 - A is milder, D is more severe





CDC Pandemic Severity Assessment Framework (PSAF)

▶ Initial assessment

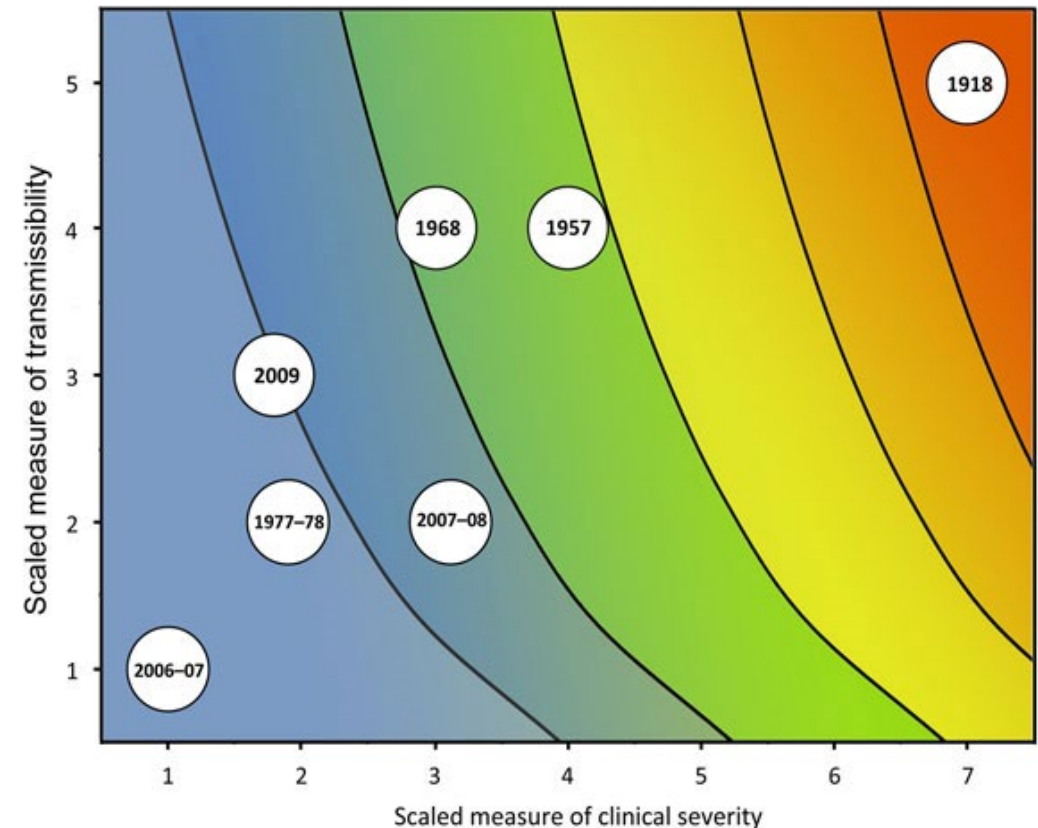
- Limited activity in pockets or specific communities
- Potential impact: How severe so far? How transmissible so far?

▶ Refined assessment

- Later in the pandemic, more info available
- Severity and transmissibility, including by age group
- Compare with previous pandemics, or even seasonal epidemics

CDC Pandemic Severity Assessment Framework (PSAF)

- Example of a refined assessment, with examples of past pandemics and past influenza seasons
 - The x-axis is clinical severity, and the y-axis is transmissibility. Examples:
 - 2006-07 was a mild influenza season, lower far left
 - 1918 was a severe pandemic, upper far right





Potential NYC Pandemic Influenza Impact (Worst-case Scenario)

► Assumptions:

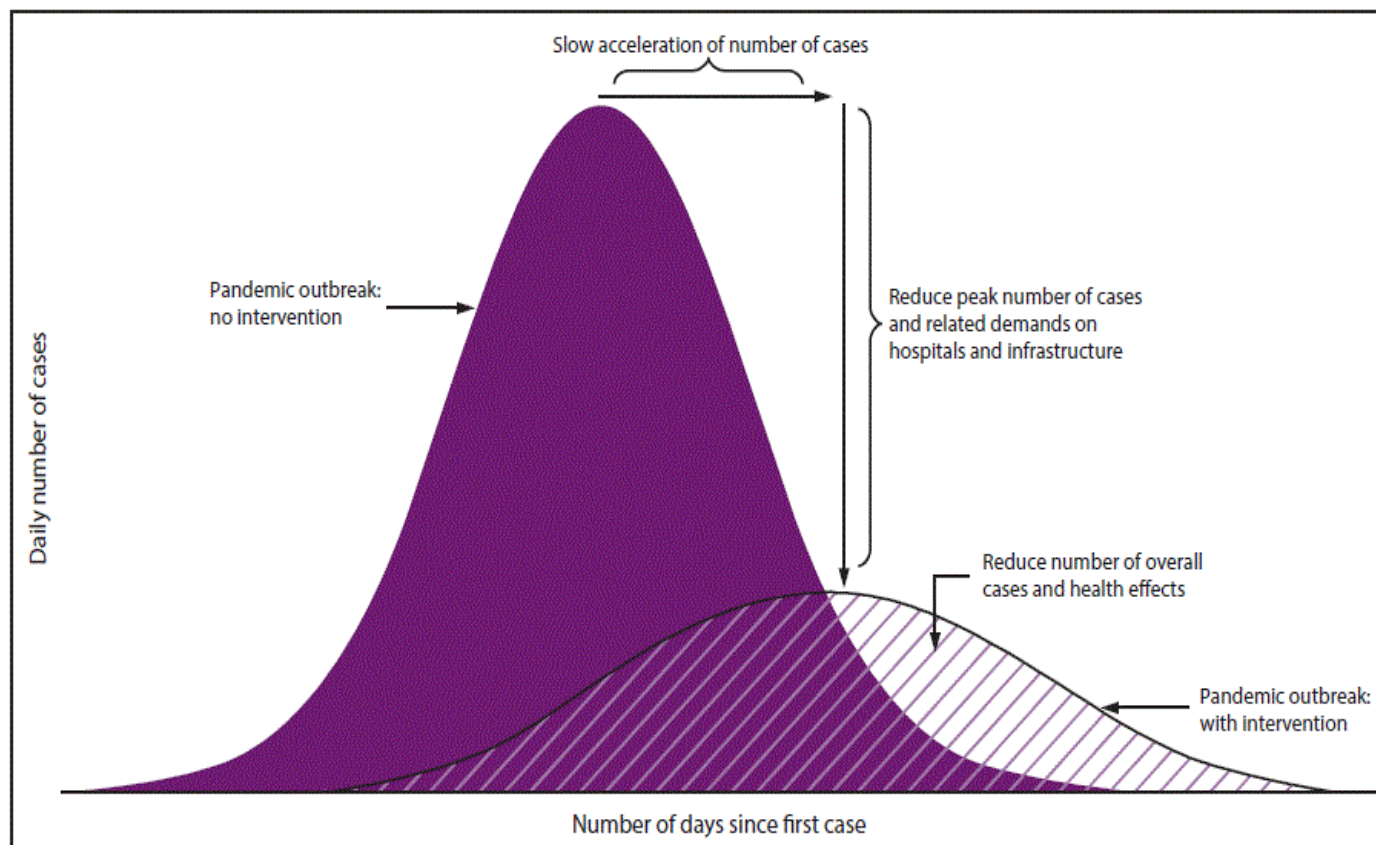
- Based on an attack rate of 33% (similar to the 1918 pandemic rate)
- Case fatality rate 2.5% (equal to 1918)
- NYC population currently estimated at 8.4 million
- Case fatality rate range US seasonal influenza 1.4-16.7/ 100,000 population

► Possible worst case for NYC:

- Cases: > 2.5 million
- Hospitalizations: *hundreds of thousands*
- Deaths:
 - Seasonal influenza range: 120-1400 deaths/year in NYC
 - Potential pandemic influenza NYC deaths: > **70,000**
 - For perspective, only about 50,000 all-cause deaths typically occur in NYC annually

What Does DOHMH Hope to Do?

- ▶ Help support all New Yorkers during a pandemic in order to limit the spread of transmission, minimize negative outcomes, and lessen healthcare impacts



“All response is local”

AGENCY & CITYWIDE RESPONSE FRAMEWORK

- ▶ In a public health emergency like a pandemic, DOHMH is part of the ‘Unified Command’ (under CIMS), along with FDNY and NYPD
- ▶ While the impact will be global, ultimately DOHMH will need to plan and respond with local partners to implement relevant public health core competencies with the assistance of citywide partners
- ▶ **Response Partners:**
 - **Command Element** – Agencies with “Incident Command” responsibilities (lead decision-makers)
 - **Supporting Agency** – Agencies that support incident operations (provision of personnel / equipment / support)
 - **Coordinating Agency** – NYC Office of Emergency Management

DOHMH Core Competencies During a Pandemic

- ▶ Any action asked and performed by the agency will fall under the following:
- ▶ Primary competencies:
 - Disease Surveillance and Epidemiology
 - Public Health Orders, Clinical Guidance and Risk Communication
 - Mass Prophylaxis/Vaccination
 - Laboratory Testing (Biological and Radiological)
 - Public Health Assessment
 - Mental Health Needs Assessment and Service Coordination
- ▶ While important to our larger response role, these will likely to not be fully utilized:
 - Environmental Mitigation (Radiological and Biological)
 - Exception: assisting with guidance on cleaning, especially school and public areas
 - Animal-Related Surveillance and Vector Control
 - Exception: concerns in the public regarding ‘wet- markets’ being sites of transmission



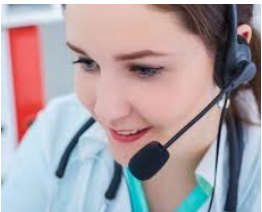


Goals of Health Care System Response

- ▶ **Provide quality care to affected patients**
- ▶ **Protect patients and healthcare personnel from health care-associated infections**
- ▶ **Maintain continuity of essential services**
- ▶ **Communication and collaboration with diverse partners for a coordinated response**

Supporting the Healthcare System

- ▶ **Support NYC hospitals and other medical service providers during an outbreak**
- ▶ **Assist with surge planning and response**
 - Coordinate with other agencies/organizations involved in healthcare system response (ESF-8, HMEExec, NYSDOH, etc)
 - “Nurse Triage Line”
- ▶ **Messaging and coordination**
 - Disseminate guidance on testing, infection control, etc.
 - Healthcare facility workgroups, provider calls, Health Alerts
- ▶ **Support countermeasure distribution to facilities**





Challenges to Health Care Delivery

- ▶ **Pandemic flu would strain already limited resources**
 - Space + Staff + Stuff
 - Particular impact on “safety net” systems
- ▶ **Factors impacting surge capabilities**
 - Variations in planning and staff experience
 - Competition for resources
 - Duration of surge
 - Geographic breadth

Space

▶ Day to day ED patient volume increasing → number of EDs decreasing

▶ Limited amount of

- ICU beds
- Emergency Department beds
- Airborne isolation rooms



▶ Need for hospital surge space and alternative sites of care

▶ Support services to decrease hospital demand

- Home care services, outpatient clinics, nurse triage lines, telemedicine

Staff

- ▶ **Shortages of nurses, physicians and other healthcare workers**
 - Limited specialists: ED, critical care, pediatric
- ▶ **Internal resources can strain quickly**
 - HCW illness/absenteeism, burnout
- ▶ **Difficult to mobilize more staff quickly for prolonged surge**
 - Competing with other institutions
 - Travelers
 - Credentialing
- ▶ **Barriers to utilizing volunteer resources**





Stuff



▶ Supply shortages expected

- Gloves, respirators, mechanical ventilators, pharmaceuticals

▶ Just in time supply chain

- Real time inventory/burn rate
- Possibility of regional/national shortages

▶ Limited information sharing

- Match supplies to need

▶ Ventilators and advanced therapies (e.g. ECMO, dialysis)

- Limited amount of equipment and trained staff
- Staff familiarity of stockpile equipment



Legal Preparedness and Crisis Standards of Care: Jurisdictional role

- **Develop with healthcare and community partner input**
- **Provide clear and accepted guidance that is fair and clinically sound *to ensure consistent and equitable triaging***
- **Maximize appropriate care for the largest number of patients**
- **Minimize morbidity and death**
 - Allocate resources to those most likely to benefit
- **Maximize self-triage and self-care by the general public**
- **Provide a legal/regulatory framework**
 - Triggers to activate protocols
 - Developing triage decisions
 - Utilizing nonstandard health care facilities in an emergency



Thank you!



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Networking Lunch



Meeting Adjourned