

An aerial photograph of New York City, showing the dense urban landscape, the Hudson River to the west, and the East River to the east. The skyline is dominated by numerous skyscrapers, including the Freedom Tower. The image is slightly faded to allow text to be overlaid.

The Brooklyn Coalition Exercise 2018: “Ebombable Brooklyn 3.0”

After-Action Meeting May 8th, 2018:
EPS/Leadership Council Meeting

Presented By: Pia Daniel, MD

Co-Authors: Bonnie Arquilla DO, Patricia Roblin MS, Brian Gillett MD

3 Sequential Drills By The Brooklyn Coalition

2015
Ebombable
Brooklyn



**EBOMBABLE
BROOKLYN 2.0**



Brooklyn Coalition for
Emergency Preparedness Exercise



2018
Ebombable
Brooklyn 3.0

Exercise Partners:



THE BROOKLYN COALITION



Department of Health

Ebombable Brooklyn 1.0-3.0 Objectives: Secondary Patient Transfers & Test Components of NY Burn Plan

The Brooklyn Coalition (TBC)

used a citywide drill to test

NYC Burn Plan*

*under development

Proposed NYC Burn Surge Protocol: Centralized Secondary Transfer of BURN MCI Victims



**PROPOSED NYC BURN SURGE
PROTOCOL**



2016 Brooklyn Coalition Exercise: Ebombable 2.0

EBOMBABLE BROOKLYN 2.0

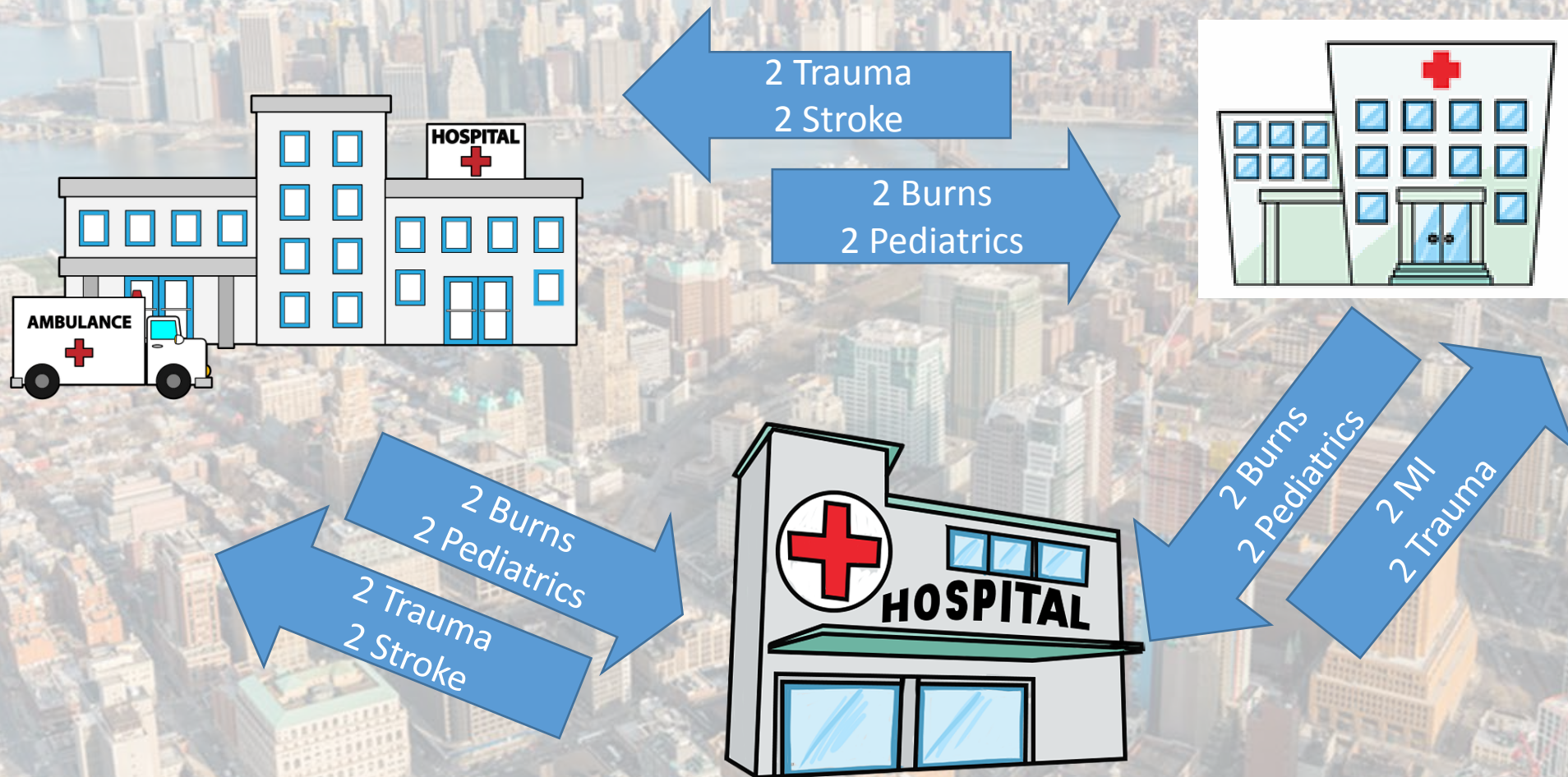


Brooklyn Coalition for
Emergency Preparedness Exercise

Ebombable Brooklyn 2.0 Vs. 3.0



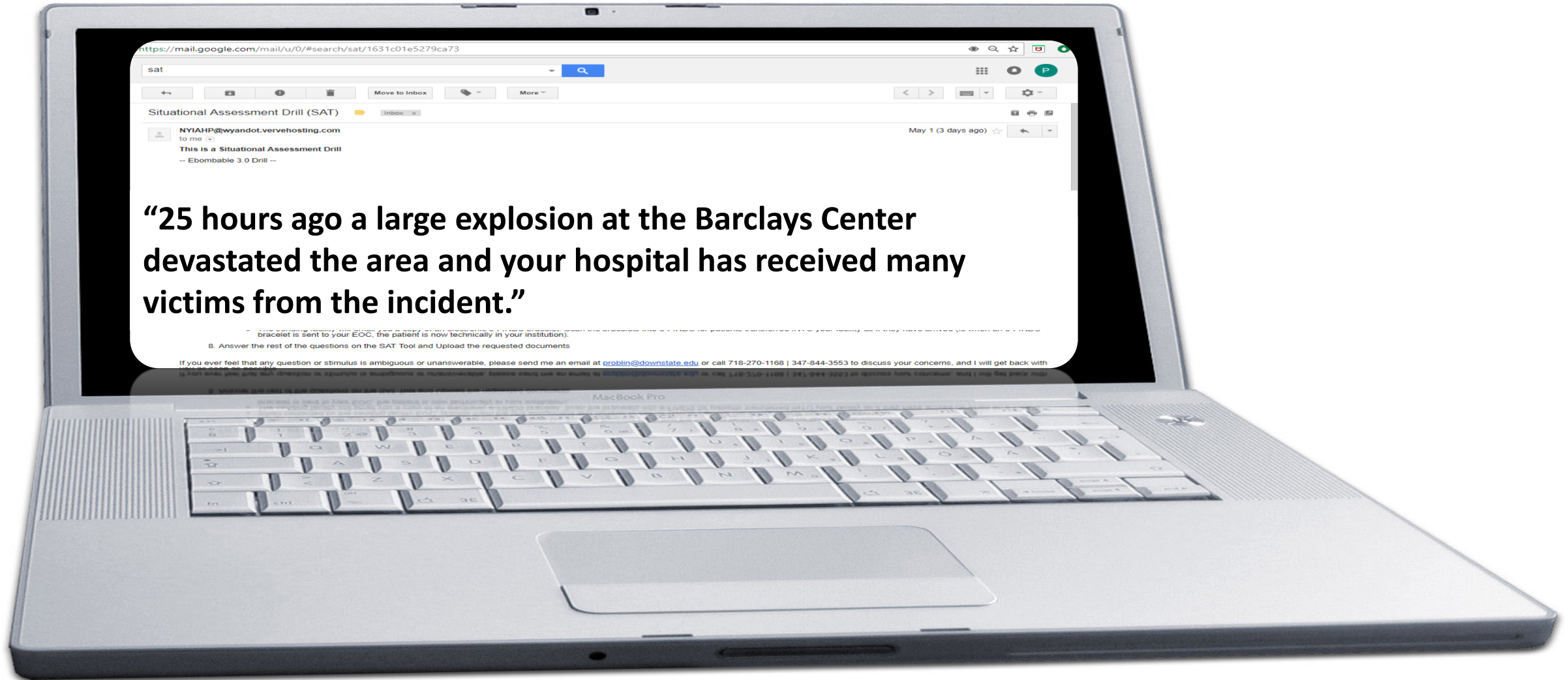
Ebombable Brooklyn 3.0: Focused on Secondary Transfer of 82 Victims



Drill Activation & Scenario Summary via Email



Drill Activation & Scenario Summary via Email





Pia Daniels: SUNY Downstate UHB

Note: Questions and answers go the bottom of the page once answered. If you want to change an answer, find the question in the 'Responses' section, at the bottom of the page, and click 'Reset'. Questions are not submitted until they have disappeared and moved to the 'Responses' section at the bottom of the page. Please remember to click the "Save" button for the questions with a dropdown. You may need to scroll down to see the "Save" button.

Drill Conclusion (May 01 2018 01:01 PM)

Initials	DOB	Gender	BP	HR	RR	O2 Sat	PMHx	Allergy	History	Physical	Actions	Meds	Upload Transfer Form to reveal disposition
HS	2/24/72	F	114/70	116	24	99	HTN	IV contrast	Found unconscious at the scene. Now mildly confused, complains of burns to torso and extremities.	Aao x3, no airway issues, 36% 3rd degree burns to torso	IV, labs	IVF, analgesics	BURN

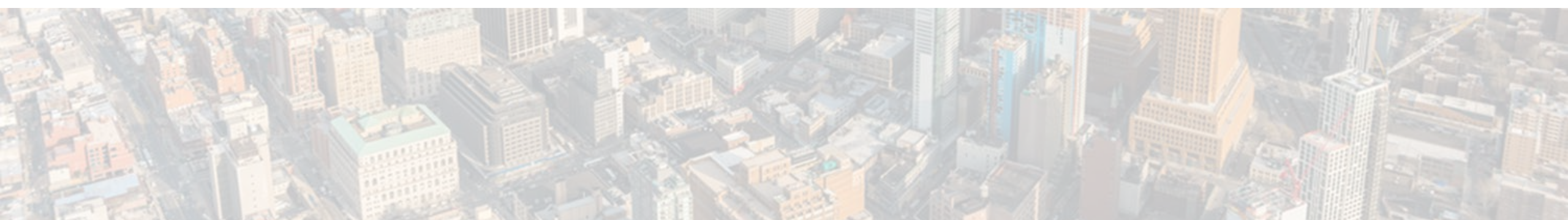
Ebombable 3.0 Drill (May 01 2018 10:01 AM)

Initials	DOB	Gender	BP	HR	RR	O2 Sat	PMHx	Allergy	History	Physical	Actions	Meds	Upload Transfer Form to reveal disposition
SU	8/1/02	M	105/60	128	22	99	None	None	Fell while running in stampede; Burn to back.	Edema w/ approx. 4cm hematoma, & tender L lateral thigh. L leg shorter & externally rotated. Good pulse & cap refill. Partial thickness burn to back; Burn surface area 10%	Left Femur Displaced Fracture; labs with Hg 5 followed by PRBC transfusion; Ortho consulted and reduced/traction placed over LLE; burn wound care	IVF, Morphine, Silvadene	BROOKDALE
SU	8/2/96	M	160/92	92	vent	97	Obese, DM	None	Found near blast site; Burn to trunk.	Weight 200kg; Agonal breathing; b/l breath sounds, Partial thickness burn to chest, abdomen and RUE; Burn Surface Area:10%	Intubated; CT head/Cspine neg; CT chest/abd /pelvis sig for multiple L rib fracture; Labs CO2 55%, Lactate 5; Burn Care to wounds	IVF, Tetanus, Cyanokit, Silvadene; insulin	BROOKDALE
SU	8/3/91	M	150/84	120	27	90	HTN	PCN	Struck by debris; c/o SOB and pain in chest that is worsening; Burn to b/l hands	Airway intact; breathing rapidly and shallow; Decreased breath sounds on right/ trachea deviated to left; Abd soft; Pelvis stable; b/l full thickness burns to hands; Burn Surface Area: 4%	EKG NSR; CXR 80% Right Pneumothorax with mediastinal shift; Needle decompression and tube thoracotomy with no blood output; Repeat CXR with improved R PTX and chest tube in place; wound care	Enalapril, Morphine; Bacitracin; Tetanus	WYCKOFF
SU	8/4/58	F	140/86	97	27	98	Schizophrenia	Peanut	Trampled in Stampede; Burn to face and abdomen	Deformities to RUE & LLE. Mild abd tenderness; Partial thickness burn to forehead; Burn Surface Area: 5%	FAST neg. C-spine, chest & Pelvis XR neg; L midshaft femur fx ; R forearm fx ; Traction Splint & Long Arm Reduction; wound care	Morphine, IVF, Tetanus; Risperdal	WYCKOFF

Patient Profiles via SAT Website



Initials	DOB	Gender	BP	HR	RR	O2 Sat	PMHx	Allergy	History	Physical	Actions	Meds	Upload Transfer Form to reveal disposition
HS	2/24/72	F	114/70	116	24	99	HTN	IV contrast	Found unconscious at the scene. Now mildly confused, complains of burns to torso and extremities.	Aao x3, no airway issues, 36% 3rd degree burns to torso	IV, labs	IVF, analgesics	



Ebombable Brooklyn 3.0: Compared 2 Versions of Transfer Request Form

Transfer Form A	Transfer Form B
Clinic	Kingsbrook
Cobble Hill	Interfaith
SUNY	NYP Methodist
DSSM	Lutheran Rehab
KCHC	Coney Island
Brookdale	Mt Sinai BK
Maimomides	NYU Lutheran
Wyckoff	Brooklyn Hospital
	Woodhull

Transfer Form A

Transfer Form A													
DATE: __/__/__			Referring Hospital:						Phone: _____				
			Address: _____						Zip: _____ Fax: _____				
Point of Contacts		Name at referring facility:						Phone: _____					
Reason for Transfer: <input type="checkbox"/> Do not have required <input type="checkbox"/> At Capacity <input type="checkbox"/> Other (specify): _____													
Patient Name: _____							Sex: M <input type="checkbox"/> F <input type="checkbox"/>		WEIGHT (kg): _____				
DOB: __/__/__			Next of Kin: _____						Phone: _____				
Date of Injury: __/__/__			Time of injury (military): _____ hrs.			Type Hazard: _____		Proximity to Hazard: _____					
Mechanism of Injury		Burn Injury: <input type="checkbox"/> Thermal Injury: <input type="checkbox"/>			Electrical Burn: <input type="checkbox"/>			Chemical: <input type="checkbox"/>					
Injury		Trauma Injury: Explosion: <input type="checkbox"/>			Structural Collapse: <input type="checkbox"/>		Other: _____						
Burn Injury* - Total Surface Burn Area (see attached burn calculation aid)													
	Head	Trunk	Rt. Arm	Rt. Hand	Lt. Arm	Lt. Hand	Rt. Leg	Lt. Leg	Perineum				
ANTERIOR										Total Anterior			
2nd°										% 2nd° _____			
3rd°										% 3rd° _____			
POSTERIOR										Total Posterior			
2nd°										% 2nd° _____			
3rd°										% 3rd° _____			
Total % 2nd degree burns: _____						Total % 3rd degree burns _____			% TDSA _____				
Burn Inhalational Injury													
<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk			None				<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk			Oral burns			
<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk			Facial Burns/Singed facial hairs				<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk			Stridor			
<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk			Singed Nasal hairs				<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk			Airway burns on endoscopy			
<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk			Carbonaceous Sputum				<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk			Airway burns on bronchoscopy			
<input type="checkbox"/> Y <input type="checkbox"/> N			Bronchoscopy? If yes describe findings: _____										
<input type="checkbox"/> Y <input type="checkbox"/> N			Other? If yes describe: _____										
Trauma													
<input type="checkbox"/> Y <input type="checkbox"/> N			Cervical Spine Fracture: _____			Cervical Orthosis: <input type="checkbox"/> Soft Collar <input type="checkbox"/> Hard Collar <input type="checkbox"/> Halo							
<input type="checkbox"/> Y <input type="checkbox"/> N			TBI: <input type="checkbox"/> Concussion <input type="checkbox"/> Depressed Skull Fracture <input type="checkbox"/> Sub/Epi-Dural Hematoma <input type="checkbox"/> Thoracic Surgery Y?										
<input type="checkbox"/> Y <input type="checkbox"/> N			Increased ICP: _____			Date: _____ mmHg: _____			Date: _____ mmHg: _____				
<input type="checkbox"/> Y <input type="checkbox"/> N			Thoracic Injuries:			<input type="checkbox"/> Cardiac Contusion <input type="checkbox"/> Sternum Fx <input type="checkbox"/> Pneumothorax <input type="checkbox"/> Hemothorax <input type="checkbox"/> Rib Fx(s)							
<input type="checkbox"/> Y <input type="checkbox"/> N						<input type="checkbox"/> Injury to major vessels <input type="checkbox"/> Blast Lung <input type="checkbox"/> Thoracic Surgery Y?							
<input type="checkbox"/> Y <input type="checkbox"/> N			Abdominal:			<input type="checkbox"/> Abd Aorta Tear <input type="checkbox"/> Liver fx/laceration <input type="checkbox"/> Splenectomy Y? <input type="checkbox"/> Ostomy Y?							
<input type="checkbox"/> Y <input type="checkbox"/> N			Orthopedic:			Crush Injury: _____			<input type="checkbox"/> Pelvic Fx				
			Fx(s): RUE _____			Redrxn: <input type="checkbox"/> Closed <input type="checkbox"/> ORIF			<input type="checkbox"/> Thoracic/Lumbar/Sacral Vertebral Fx(s)				
			LUE _____			<input type="checkbox"/> Closed <input type="checkbox"/> ORIF			<input type="checkbox"/> Fasciotomy Y?				
			RLE _____			<input type="checkbox"/> Closed <input type="checkbox"/> ORIF			<input type="checkbox"/> Amputation: Extremity _____				
			LLE _____			<input type="checkbox"/> Closed <input type="checkbox"/> ORIF			<input type="checkbox"/> Escharotomy: Location _____				
<input type="checkbox"/> Y <input type="checkbox"/> N			Other: _____										
<input type="checkbox"/> Y <input type="checkbox"/> N			Drains: Chest Tube: <input type="checkbox"/> Rt <input type="checkbox"/> Lt			<input type="checkbox"/> Abdominal			<input type="checkbox"/> Nasogastric Tube			<input type="checkbox"/> Gastric Tube	
			<input type="checkbox"/> Stents: Type _____			Where _____			<input type="checkbox"/> Wound(s): Describe _____				
Assessment of current status Date: _____ Time: _____													
ASA Status* :			<input type="checkbox"/> I <input type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/> IV <input type="checkbox"/> V <input type="checkbox"/> VI										
Hemodynamic Status			<input type="checkbox"/> Hypotensive? <input type="checkbox"/> Is the patient on pressors?			<input type="checkbox"/> Hemodynamically stable for transport							
Respiratory Status:			<input type="checkbox"/> Spontaneous <input type="checkbox"/> Supplemental FiO2			<input type="checkbox"/> CPAP							
			<input type="checkbox"/> Intubated Date: _____ Size: _____			<input type="checkbox"/> Trach Date: _____							
Ventilator Settings:			Mode: _____ RR: _____ TV: _____ FiO2 _____ PEEP: _____ PS: _____										
Monitoring Status:			<input type="checkbox"/> CVP Catheter Date placed _____			<input type="checkbox"/> Arterial Line Date placed: _____							
			<input type="checkbox"/> Swann-Ganz Catheter: _____			<input type="checkbox"/> ICP monitor: Date placed _____							
Mental Status:			<input type="checkbox"/> Unresponsive <input type="checkbox"/> Reactive to: <input type="checkbox"/> Verbal Stimuli <input type="checkbox"/> Painful Stimuli										
			<input type="checkbox"/> Alert <input type="checkbox"/> Oriented to: <input type="checkbox"/> Name <input type="checkbox"/> Place <input type="checkbox"/> Date										
Other Clinical Issues (check all that apply): _____													

Transfer Form B

Transfer Form B

Institutions requesting MCI patient secondary (inter-facility) transfer will be requested to provide the following Patient Information (please complete ALL categories listed below):

a) Sending hospital: _____

Patient Transfer ICS Contact: Name _____ Phone _____

Sending Physician Contact: Name _____ Phone _____

b) Reason for Transfer: Don't have Service Hospital / Service is Full

Other _____

c) Patient age or size (infant, toddler, child, adolescent, adult, elderly): _____

d) Nature of injury/injuries: _____

e) If Burn: %TBSA _____ Airway Involved?

f) Interventions: Surgery/Chest Tube/Fasciotomy etc.: _____

Cardiac arrest (this admission)? if Yes, how long until ROSC _____ min

g) Is patient Hemodynamic Stable for transfer (Circle One)? Yes / No

i. Is the patient on Pressor(s)? Yes / No

h) Respiratory Support: Intubated? BiPAP? _____ %O₂

i) Vital signs: BP: _____ HR: _____ RR: _____ O₂ Sat/ETCO₂ (if available): _____

j) Neuro: Cervical Orthosis? Glasgow Coma Scale: _____

k) Currently administered Medications: _____

l) Radiological/US/Laboratory critical finding: _____

m) Co-morbidities / Chronic Conditions: _____

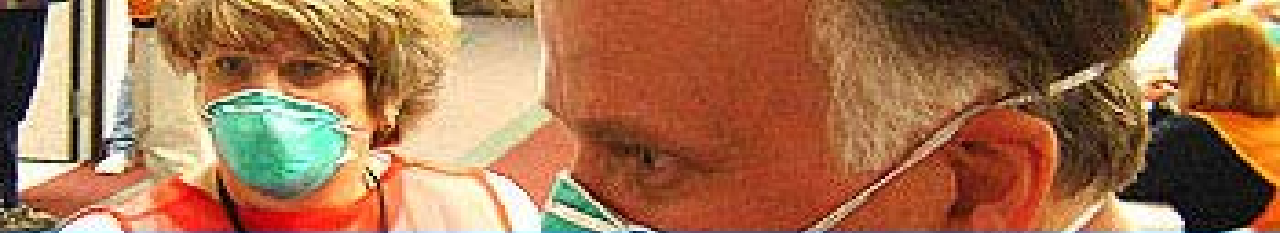
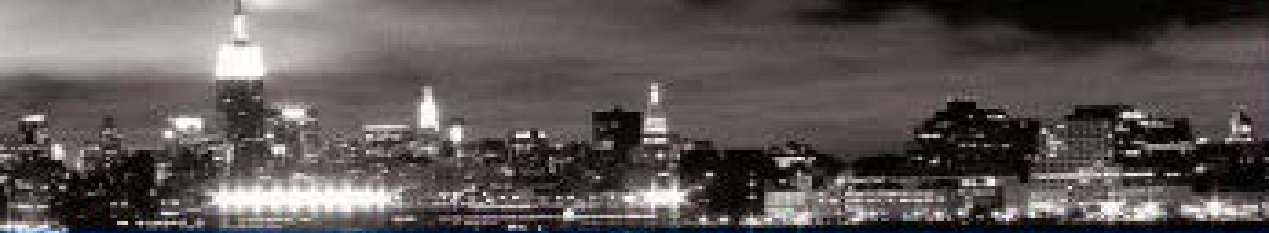
n) Chronic Medications (outpatient): _____

Needs: Bed Type: Pediatric ICU Adult ICU

Special Bed Need (AIIR, bariatric, etc.): _____

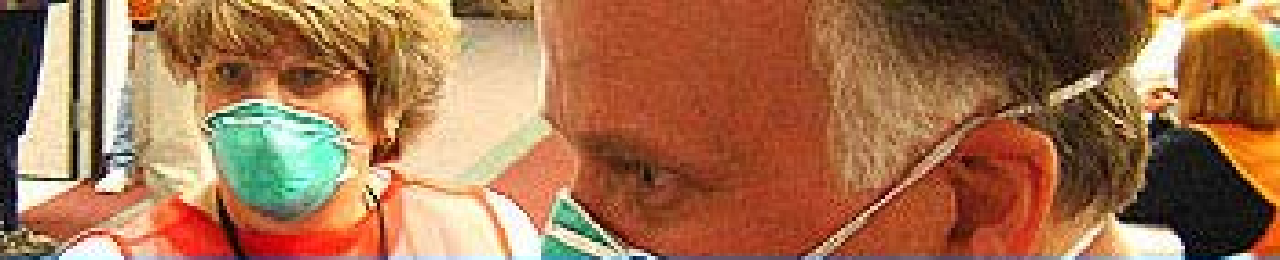
SAT Data: Comparing Transfer Form A vs. B

Question	Form A	Form B
Was there INFORMATION MISSING on the Form?	50%	44%
Was the Form EASY TO FILL OUT ?	83%	78%
Will the Form be HELPFUL in a MCI ?	83%	78%
Did you find the Form USEFUL FOR RECEIVING a patient?	100%	67%
Is the Form TOO LONG ?	33%	22%
Did the Forms give adequate data for UNIT ASSIGNMENT ?	67%	78%



SAT Data: Assessing the EOCs

Question	% YES
Were you able to speak to all facility EOCs that you TRANSFERRED OUT patients to?	67%
Were you able to speak to all facility EOCs that you RECEIVED patients from?	80%
Did your Emergency Operations Center (EOC) utilize clinical staff during the drill?	93%
Did your EOC use a patient tracking form during this drill?	60%

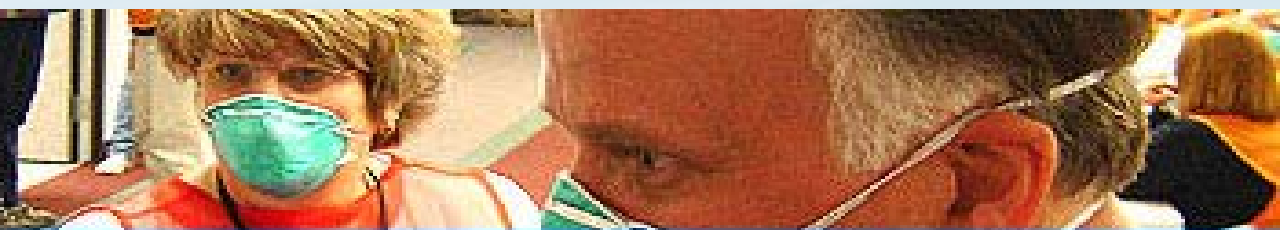
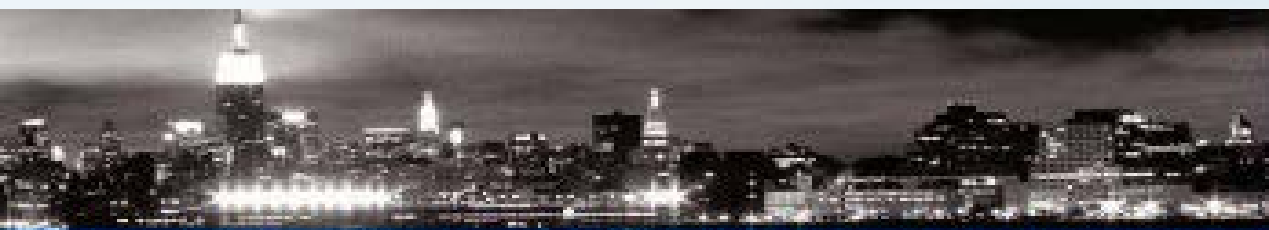


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DISASTER TRAINING FOR SERVICE PROFESSIONALS

SAT Data: Assessing the EOCs

Roles of clinical staff in EOC	% YES
We did not utilize clinical staff during the drill	3%
Filling out Patient Transfer Forms	37%
Assigning Beds/Units for Transfers	27%
Communicating with other facilities	27%
Other	7%



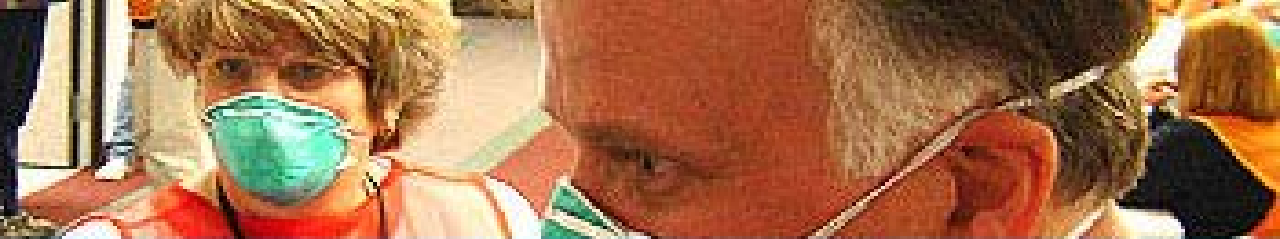
SAT Data: Assessing e-FINDS

Question	% YES
Did you encounter problems using e-FINDS?	47%
Did you place all transferred patients into e-FINDS?	80%
Did you need technical assistance with e-FINDS?	27%



SAT Data: Assessing e-FINDS

Types of e-FINDS Problems	% YES
I did not have any problems with e-FINDS	36%
Unable to enter patients	7%
Unable to print bands	7%
Unable to scan bands	14%
Unable to track patients in e-FINDS	7%
Other	29%



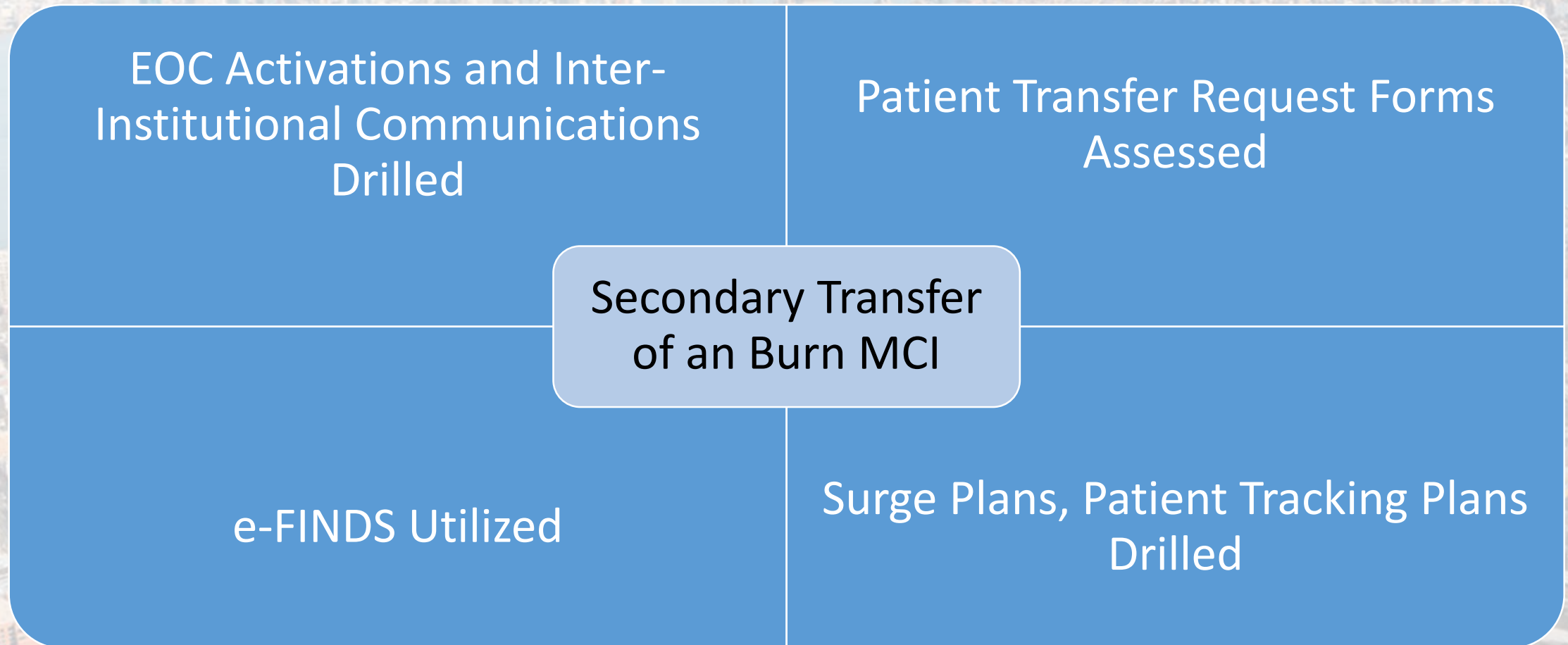
NEW YORK INSTITUTE FOR ALL HAZARD PREPAREDNESS

DISASTER TRAINING FOR SERVICE PROFESSIONALS

SAT Data: Assessing the Drill

Question	% YES
Was this drill helpful in preparing for an MCI/Event?	93%
Would you like to participate in similar drills in the future?	100%

Conclusion: The Brooklyn Coalition Exercise “Ebombable Brooklyn 3.0”



QUESTIONS?



NEW YORK CITY HEALTH CARE COALITION (NYCHCC)

Emergency Preparedness Coalition of Manhattan (EPCOM) Presentation

Andrew Dahl, Sr. EM Specialist
Joseph Picciano, Sr. Emergency Manager



AGENDA

Project Updates

Regional Resilience Assessment Program (RRAP)

Exercise Updates

DHS / EPCOM Healthcare Supply Chain Exercise


Questions

Regional Resilience Assessment Program (RRAP)


THE REGIONAL RESILIENCY ASSESSMENT PROGRAM

Resiliency Assessment

New York City Regional Healthcare Supply Chain RRAP Project



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NYU Langone Health

The Office of Infrastructure Protection

National Protection and Programs Directorate
Department of Homeland Security

Regional Resiliency Assessment Program
NYC Regional Supply Chain Project

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Key Project Themes

- 1) Better understanding of healthcare supply chains is needed for effective disaster planning.
- 2) Wide diversity of healthcare facility types and patient populations must be factored into supply chain resilience efforts.
- 3) Risks to healthcare supply chains vary widely and require more detailed examination.
- 4) Greater resilience requires timely visibility across otherwise complex and segmented healthcare supply chains.
- 5) Increased cooperative planning on supply chain resilience is needed within the region's healthcare community.
- 6) Government can play a critical role in healthcare supply chain resilience, but it must continuously build its corresponding knowledge, plans, and operational structures.




Project Deliverables

Project Report


THE REGIONAL RESILIENCY ASSESSMENT PROGRAM

Resiliency Assessment

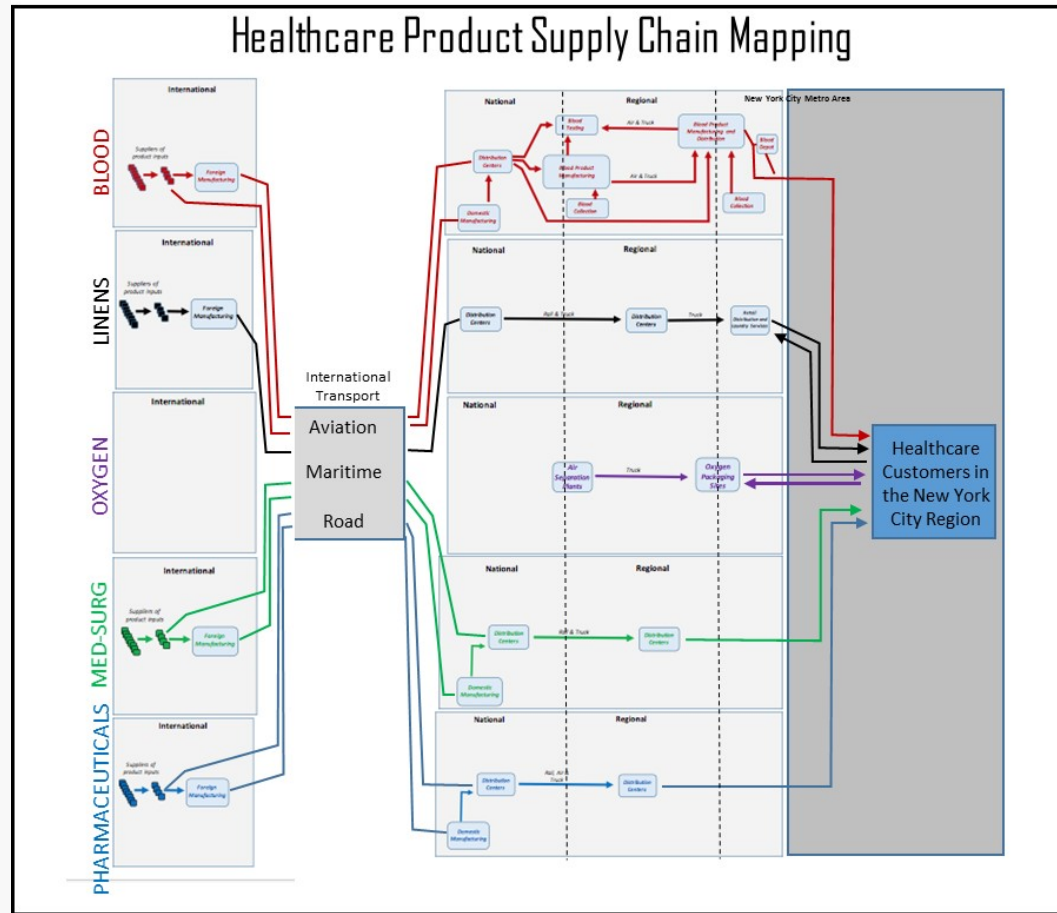
New York City Regional Healthcare Supply Chain RRAP Project



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Interactive Supply Chain Navigator



Homeland Security

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Presenter's Name

June 17, 2003

Project Deliverables

Supply Chain Profiles

DRAFT

Supply Chain Profile for Blood Products New York City Regional Healthcare Supply Chain RRAP Project



Overview

Medical treatments can involve transfusions of several types of blood products, including whole blood, red cells, platelets, plasma, and other components. The general target for the New York City region is to have 5-10 days of blood products for each blood type on-hand at any given time. While fluctuations occur throughout the year, blood supplies are not considered to be critically low unless they fall under 3 days of inventory.

Similar to other healthcare products, a network of blood manufacturers and distributors work together to deliver supplies on a daily basis to healthcare facilities. Lean inventory practices are increasingly being used within the blood product supply chain in the New York City region, with end customers holding as small an inventory as possible and relying on frequent deliveries from suppliers.

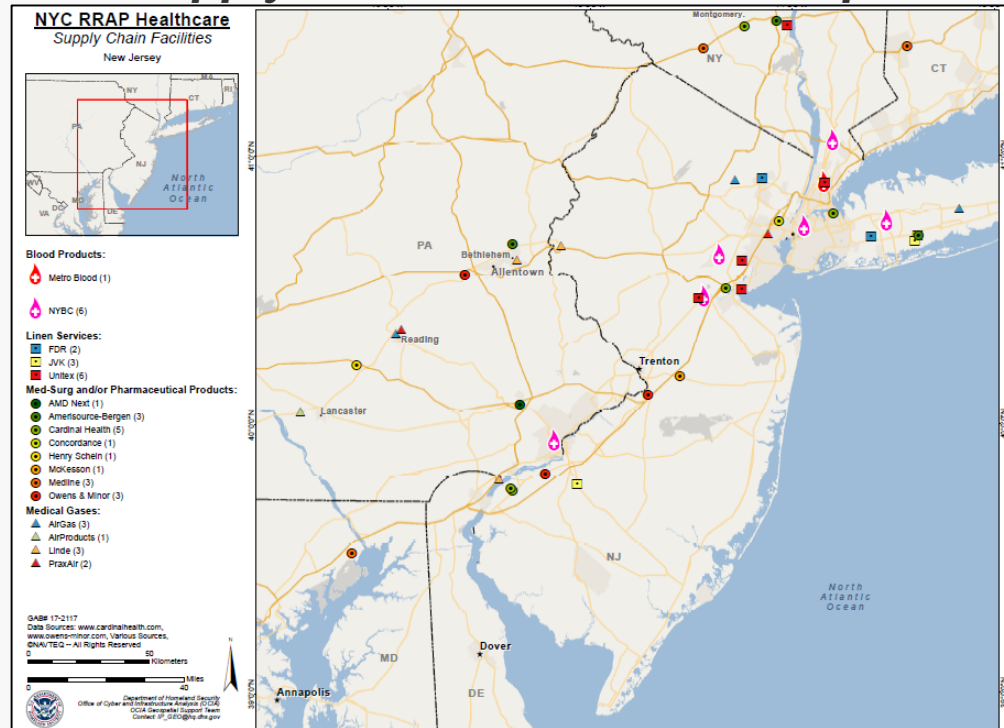
Nationally, the supply of blood products is considered to be stable. Despite the potential for local shortfalls in donations and spikes in demand, blood products can be sourced from other regions and rapidly delivered in cases of emergency need.

It is critically important to also consider the supply chains for the range of "support" products that underpin the blood supply, such as blood bags, testing machinery, and transport equipment, much of which is manufactured overseas. These items must be factored into a broader view of and planning for the combined blood products supply chain.

There are two major suppliers of blood products to healthcare facilities in the region: New York Blood

1

Supply Chain Infrastructure Maps



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Presenter's Name

June 17, 2003

Next Steps

- Refinement, review, issuance of deliverables in 2018
- Transition to follow-on actions in the NYC region
 - Supply chain TTX/workshop
 - Topic-specific training/webinars
 - Expanded information resources
 - Coalition work
- 2018 RRAP: Aviation Transportation (Healthcare)



DHS / EPCOM Healthcare Supply Chain Exercise



- Tabletop Exercise to explore the implications of a Supply Chain Break
- Partnership with Department of Homeland Security
- Participants include:
 - EPCOM healthcare institutions
 - Government Partners (local, state, federal)
 - Private Sector Suppliers
- Scenario focused on provoking thought on solving supply chain issues

DHS / EPCOM Healthcare Supply Chain Exercise

- Panel of SMEs from private industry suppliers
- Focusing specifically on:
 - Med/Surge
 - Blood
 - Medical Gases
- Looking past traditional scenarios NYC has experienced



DHS / EPCOM Healthcare Supply Chain Exercise

Next Steps

- Engage your supply chain departments
- Invite them to participate in the exercise
- Save the date for June 7, 2018

**EPCOM Supply Chain TTX
June 7, 2018**



EM + ER
Emergency Management
Enterprise Resilience



THANK YOU



QCEPHC MCI EXERCISE 2017

SUBWAY BOMBING INFLUX - SURGE

David A. Baksh
Associate Executive Director – Operations
NYC Health + Hospitals | Queens
Chairperson - QCEPHC

BACKGROUND

- Queens County Emergency Preparedness Healthcare Coalition
 - Mission
 - Vision
 - Historical (2009 to Present)

EXERCISE PARTICIPANTS

- QCEPHC Partners

- NYC Health + Hospitals | Queens (189)
- NYC Health + Hospitals | Coler (10)
- NYC Health + Hospitals | Elmhurst (10)
- Northwell Health | LIJMC (10)
- Northwell Health | Forest Hills (10)
- Northwell Health | Cohen Children's Hospital (10)
- NY Presbyterian Queens (10)
- NYP – Silvercrest Center for Nursing & Rehabilitation (10)
- Mt. Sinai Queens (10)
- Medisys / Jamaica Medical Center (10)
- Medisys / Flushing Medical Center (10)
- Medisys / Trump Nursing Home (10)
- St. John's Episcopal Hospital (10)

- NYC Partners

- NYC Health + Hospitals
- NYCEM
- NYCDOHMH

- NYSDOH

- Creedmor (30)

EXERCISE SCOPE

- Overview
 - Scenario
 - EMS MCI Notification Levels
- Objectives
 - HCC Communications
 - Situational Awareness
 - Resource Needs

EXERCISE DAY

- Overview
- Patient Flow
- Artificiality
- Hot Wash



RESULTS

- What went well
- Areas For Improvement
- Conclusions



QUESTIONS

THANK YOU!