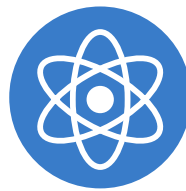
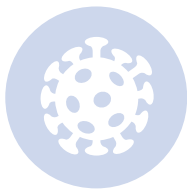


MASS CASUALTY INCIDENT RESPONSE TOOLKIT



Guidance for Hospitals to Prepare and Train
for Mass Casualty Incidents

Dedicated to the memory of Michael Guttenberg, MD, a member of GNYHA's Hospital Bed Availability Workgroup, a key architect of this document, and an amazing physician, colleague, and friend.

TABLE OF CONTENTS

1	INTRODUCTION
3	RESPONSE PLANNING FOR AN MCI: KEY CONCEPTS
5	Prologue: Emergency Management Foundations Related to MCI Response and Patient Surge
5	Emergency Management Requirements Related to Patient Surge
5	Key Structures & Systems that Support Hospital Patient Surge Capabilities
9	Chapter 1. Monitoring, Notification & Activation Protocols
9	Awareness of an Incident
13	Internal Notifications and Activation
16	Preparing the ED and Other Key Departments Involved in MCI Response
21	Considerations When the Hospital is the Site of the Emergency
23	Chapter 2. Patient Triage
23	Preparing for Patient Arrival
23	Preparing for Patient Triage
24	Understanding the Shift to a Disaster Mindset
27	Chapter 3. Clinical Management
27	Creating Capacity and Organizing the ED
28	Prioritizing Critical Patients
29	Identifying and Registering Patients
30	Moving Patients to Definitive Care
34	Special Considerations for Vulnerable Populations
36	Ensuring Continuity of Care with Tertiary Survey on a Grand Scale
37	Chapter 4. Safety & Security
37	Immediate Security Actions
37	Law Enforcement Security Presence and Coordination
38	Decontamination Considerations
38	Staff Access and Emergency Credentialing
41	Chapter 5. Supporting Family and Friends in the Aftermath
41	Challenges with the Second Surge
45	Family Reunification and Assistance in New York City
49	Chapter 6. Managing the Community Response to an MCI
49	Media Management
49	Injured Members of Service and the Presence of Public Officials and Other Dignitaries
50	Donation Management

51 Chapter 7. Legal and Regulatory Considerations

- 51 EMTALA During Emergencies
- 51 Law Enforcement Investigations
- 52 Privacy Law and Medical Information Sharing

55 Chapter 8. Recovery

- 55 Caring for Staff and Psychological First Aid
- 56 Moving to the Intermediate Phase
- 57 After-Action Conferences and Developing Improvement Plans

59 FROM PLANNING TO ACTION: PREPARING STAFF FOR AN MCI RESPONSE**61 Chapter 9. Preparing Hospital Staff for MCI Response**

- 61 Hospital Training and Exercise Requirements
- 62 Using Exercises to Prepare for MCI Response
- 63 Hospital- and Network-Level Exercises

65 END NOTES**69 APPENDICES**

- 69 Appendix A. Response Aids
- 76 Appendix B. NYCEM Situational Awareness Application
- 77 Appendix C. Social Media Monitoring
- 80 Appendix D. Hospital Emergency Radio Outgoing Message Pilot Program
- 85 Appendix E. EMS-to-Hospital Response Process for Mass Casualty Incident
- 91 Appendix F. Pre-Hospital to Hospital Communication Protocols for MCIs
- 94 Appendix G. Improving Situational Awareness with "PENMAN"
- 95 Appendix H. Hospital Abbreviations and Items in Support of Regional Unidentified Patient Naming Convention
- 97 Appendix I. Hospital Coordination with Law Enforcement
- 101 Appendix J. Developing Family Reunification Plans and Centers
- 103 Appendix K. Privacy Law and the Sharing of Medical Information During Emergencies
- 107 Appendix L. Scenarios to Support Exercises

INTRODUCTION

Greater New York Hospital Association (GNYHA) prepared this toolkit to help member hospitals develop and improve their mass casualty response plans. Mass casualty incident (MCI) response is a critical focus area for GNYHA and its member hospitals. Over the past several years, GNYHA's collaborative planning efforts for MCI response, in coordination with government response agencies and the health care community, have resulted in new communication protocols and structures, as well as targeted training and programming. This toolkit—designed to assist hospitals throughout the GNYHA membership and beyond—organizes and synthesizes much of the information developed via these collaborative processes, and details emerging best practices from intentional attacks that occurred in the United States and internationally.

In the New York region, MCIs occur frequently, with the majority producing few patients. However, MCIs that result in large numbers of patients, including critical patients with life-threatening injuries, have the potential to quickly overwhelm area hospitals. Hospitals must be prepared to effectively and efficiently respond to such incidents while continuing to meet the needs of other patients.

The toolkit includes suggested preparedness and response actions for the many clinical and non-clinical departments that would be involved in an MCI response. While patient care is the priority, the toolkit emphasizes the importance of planning for and developing protocols and processes for additional activities, including patient registration and tracking, family reunification, and coordination with external entities. If these non-patient care activities are not thought through in advance, the impact can overwhelm a facility and compromise its ability to deliver lifesaving care.

While the toolkit refers to several New York City-specific protocols and resources, GNYHA believes the content will

be of value to hospitals throughout the New York metropolitan region. Where possible we have included information about other jurisdiction or state-level resources or processes.

Acknowledgments

This toolkit stems from the work of the Hospital Bed Availability Workgroup, which began meeting in 2016 with the goal of improving communication and coordination between New York City's Emergency Medical Services system and 911-receiving hospitals. Co-led by the Fire Department of the City of New York and GNYHA, this workgroup drew upon the considerable expertise of its members from hospitals and health systems across the region, including Maimonides Medical Center, Medisys Health Network, Montefiore Health System, Mount Sinai Health System, NewYork-Presbyterian Health System, Northwell Health, NYC Health + Hospitals, and NYU Langone Health, and representatives from NYC Emergency Management, the New York City Department of Health and Mental Hygiene, the New York State Department of Health, and the Regional Emergency Medical Services Council of NYC. GNYHA is grateful to workgroup members and representatives of Albany Medical Center, the Brooklyn Healthcare Coalition, Kaleida Health, and Yale New Haven Health System, who also reviewed and contributed to the toolkit's development. GNYHA is also grateful to those at City, State, and Federal agencies who reviewed parts of the toolkit and contributed their expertise to its development. The toolkit's recommendations and strategies also reflect the experiences of hospitals during recent major MCIs, including in Boston, Orlando, and Las Vegas.

GNYHA extends special thanks to Emily Coakley and Samia McEachin for their substantial contributions to the writing of this toolkit.

RESPONSE PLANNING FOR AN MCI: KEY CONCEPTS

PROLOGUE:

Emergency Management Foundations Related to MCI Response and Patient Surge

MCIs are one of many emergency situations for which hospitals must be prepared. This brief prologue describes how preparedness for MCIs and the resulting patient surge fit within the larger health care emergency management context framed by Federal requirements and accreditation standards. It also reviews key health care emergency management structures and systems, creating an understanding of how to apply them to MCI response.

This section is NOT meant to be a comprehensive overview of health care emergency management requirements or systems, but rather to connect them to MCI-specific response planning.

EMERGENCY MANAGEMENT REQUIREMENTS RELATED TO PATIENT SURGE

The Centers for Medicare & Medicaid Services (CMS) 2017 final rule on emergency preparedness, and The Joint Commission's (TJC) Emergency Management Standards form the foundation for hospital emergency preparedness programs.

The CMS final rule requires hospitals to:

- Develop an emergency plan using an "all hazards" approach that is updated annually
- Develop an emergency preparedness communications plan that complies with state and Federal laws and includes other hospital's contact information and a method for sharing information and medical documentation with patients
- Develop and implement policies and procedures to support these plans and update them annually
- Create a system to track on-duty staff and sheltered patients during an emergency
- Develop and provide annual training for staff, and participate in a full-scale community or facility-based drill, with another exercise the facility chooses

TJC Emergency Management Standards focus on:

- Developing and testing an Emergency Operations Plan (EOP)
- Using a Hazard Vulnerability Analysis process to identify potential threats, hazards, and adverse events
- Managing six critical areas during response and recovery: communications, resources and assets, safety and security, staff responsibilities, utilities, and patient clinical and support activities

CMS and TJC require hospitals to consider likely hazards that could overwhelm their facility. In the New York region, an external MCI resulting in a surge of critical and non-critical patients is a hazard for which all hospitals should be prepared. By creating a patient surge or mass casualty appendix for a facility's EOP, and having specific policies and protocols that address the TJC's six critical areas, hospitals can increase their preparedness for patient surge events resulting from MCIs. The following section details key structures and systems that support patient surge capabilities.

KEY STRUCTURES & SYSTEMS THAT SUPPORT HOSPITAL PATIENT SURGE CAPABILITIES

EOP and Hazard-Specific Appendices or Guides

All hospitals are required to create an EOP using an all-hazards approach that is updated annually. Most hospitals also develop hazard-specific annexes or appendices that contain protocols or processes particular to a specific hazard. Common terms for protocols specific to MCI response include: MCI plan, trauma plan, or Emergency Department (ED) surge plan. Hospital emergency management committees, which meet regularly to direct a facility's emergency management program, often develop or review EOPs and appendices.

Common elements of an MCI or ED surge plan may include: plan activation, communication protocols, accessing and using specialized equipment such as disaster carts and disaster registration packets, alternate treatment areas, triage and patient registration protocols, the role of support services departments, activation of complementary operations such as a family assistance center (FAC) and phone bank, and information about recovery and after-action processes.

EOPs should be developed and revised with input from the Emergency Management Committee and representatives of the various clinical and non-clinical departments, such as the operating room (OR), inpatient floors, environmental services, and supply chain.

Local first responders and regional planning agencies are other crucial partners in developing these plans. Familiarity and good working relationships with local police, fire, and emergency medical service (EMS) agencies are vital to MCI response.

Response Structures

The US Department of Homeland Security (DHS) adopted the National Incident Management System (NIMS) in 2004. One of its most important “best practices” is the Incident Command System (ICS), a standard, on-scene, all-hazards incident management system that firefighters, hazardous materials teams, rescuers, and emergency medical teams have used since the 1980s.¹



CMS Emergency Preparedness Rule website: Contains information about the Emergency Preparedness final rule that required provider compliance as of November 15, 2017.

<https://www.cms.gov/medicare/provider-enrollment-and-certification/surveycertemergprep/emergency-prep-rule.html>



New York State Department of Health website: Provides information on emergency preparedness regulations, and hazard-specific information and resources health care providers.

https://www.health.ny.gov/environmental/emergency/health_care_providers/



Connecticut Department of Health website: Contains resources and information from the Department of Health’s Hospital Preparedness Program.

<https://portal.ct.gov/DPH/Public-Health-Preparedness/Main-Page/Hospital-Preparedness-Program>



TJC Emergency Management Resources portal: Provides information on specific events and updates of emergency management standards.

https://www.jointcommission.org/emergency_management.aspx

The Hospital Incident Command System (HICS), an adaptation of ICS developed in the 1980s, incorporates hospitals’ unique capabilities to meet emergencies. A HICS hallmark is the ability to expand the structure as the situation demands. Because a patient surge event usually begins in the ED, many hospitals have built-in mechanisms that quickly activate and organize ED personnel and request additional resources from other departments.

Hospital Incident Management Team

Individuals activated within HICS to respond to a particular incident make up the Hospital Incident Management Team (HIMT). While each situation is distinct, hazard-specific Incident Response Guides often detail the positions and sections that will likely need to be activated. A model that relies on an ICS board in the ED (which is

updated daily) is described in the Monitoring, Notification & Activation Protocols section.

Other HICS hallmarks are the use of job action sheets, specific position guidance for each HIMT member and other HICS roles, HICS forms for documentation, resource requests, safety information, and other standard response needs. Activating the Hospital Command Center, a physical place within the hospital where important response and coordination activities occur,² is a key initial action during large responses.

Response Systems and Protocols

Hospital MCI response plans should also incorporate critical response systems and protocols as described below.

Mass Notification

A key component of MCI response is communicating with hospital and health system staff. Many hospitals regularly use mass notification systems such as Everbridge and Send Word Now to share information with employees. Such systems should be integrated into MCI response plans. Many hospitals have developed pre-written notification e-mails and pre-determined groups for various activation types and levels.

Other processes or protocols that hospitals may develop in advance to support MCI response include:

- Disaster patient registration protocols (see the Clinical Management section)
- Override protocols for the Pyxis medication dispensing system
- Pre-determined procedures that bring certain amounts of blood product to the ED from the blood bank
- Delaying or cancelling planned surgeries to free up OR space

Response Aids

Hospitals often use checklists to implement MCI response-specific protocols and processes. These response aids are especially important when asking

staff to take actions that differ from their day-to-day activity. [APPENDIX A: RESPONSE AIDS](#) includes examples of department-specific checklists and instruction sheets.

Training

Staff training for MCI response should complement and build upon the broader emergency preparedness and response training required by CMS and TJC. Hospitals increasingly use huddle formats during unit or departmental meetings to introduce and train staff on MCI response-specific protocols.

Exercises & Drills

Exercises and drills should also build on existing requirements. CMS and TJC require annual exercises, which are an ideal opportunity to test MCI response capabilities. Hospitals also increasingly rely on 10–15 minute mini-drills to bolster staff familiarity with MCI response-specific protocols and processes and to develop their ability to function during high-stress events.

CHAPTER 1:

MONITORING, NOTIFICATION & ACTIVATION PROTOCOLS

Many MCIs occur with no warning, such as shootings or car crashes, which are also termed “no notice” events. Hospitals can use the following tools to better understand MCIs in their area and prepare for the influx of patients.

AWARENESS OF AN INCIDENT

MCIs require a swift response from the health care delivery system. Therefore, a hospital’s ability to gather relevant and accurate information on an incident is vital. There are many ways that hospitals can learn about an incident near their facility. Because early information is often inaccurate and incomplete, hospitals need to monitor sources and adjust their response accordingly. *Even when multiple sources are available, hospital staff will likely have to make decisions based on incomplete information.*

Monitoring Services and Sources

Hospital emergency managers and other key staff can subscribe to various government or commercial monitoring services, which generally can be customized by geography and type of information.

Government Resources

- **Notify NYC:** New York City’s official news source for emergency events and important City services can be a valuable resource for hospitals. Notify NYC staff work with NYC Emergency Management’s (NYCEM) Watch Command to monitor emergency activity in New York City and the metropolitan area. Notify NYC’s website offers notifications on nine topics, including emergency alerts, significant event notifications, and public health notifications. The emergency notification office uses e-mails, text messages, tweets, and phone calls to contact residents and can also activate New York City’s Emergency Alert System

(EAS), which immediately delivers information via television and radio.



[https://a858-nycnotify.nyc.gov/notifynyc/\(S\(dkdxfxnb4ocpntwz21ttfys\)\)/home.aspx](https://a858-nycnotify.nyc.gov/notifynyc/(S(dkdxfxnb4ocpntwz21ttfys))/home.aspx)

- **NYCEM All-Call E-mail Notifications:** New York City hospital emergency managers and other key staff can also register to receive NYCEM all-call e-mail notifications 24/7. These e-mails provide information on events impacting mass transit and roadways, as well as fires, building collapses, and other incidents that may result in patients or could otherwise impact hospital operations. Individuals must apply and be approved to receive these emails due to the sensitive public safety information that is meant for official use only (see [APPENDIX B: NYCEM SITUATIONAL AWARENESS APPLICATION](#)).
- **NY Alert:** More than three dozen county and local governments, the City University of New York, and State University of New York systems share their emergency notifications publicly via NY Alert. Notifications are sent via text message, e-mail, phone, or fax to detail major closures, severe weather events, life-threatening events, and other emergency information. Enrollees in this free service can also filter notifications by geographical area, type of notification, and method of notification.



<https://alert.ny.gov/>

- **New Jersey Alert:** New Jersey State Police and the New Jersey Office of Emergency Management use Nixle, an Everbridge company, to send alerts via text message, e-mail, and phone. En-

rollment is free. Several local governments also use Nixle. Many counties also have their own countywide text alert systems available to the public.



<http://ready.nj.gov/plan-prepare/staying-informed.shtml>

- **Connecticut Alert ENS:** The Connecticut Division of Emergency Management and Homeland Security and Department of Public Health issue alerts using the Everbridge notification platform.



<https://www.ctalert.gov/ctalert/site/default.asp>

Social Media

Hospitals can monitor real-time, user-generated content on social media platforms to enhance their situational awareness, manage rumors, and support operational decision-making during MCIs. Various tools can track trends across social media platforms and gather insights from aggregated content. Social media monitoring efforts may occur at the level of the individual hospital and/or hospital system, depending on particular needs, capacity, and infrastructure. More information on social media monitoring capability, including free and fee-based resources can be found in [APPENDIX C: SOCIAL MEDIA MONITORING](#).

Many hospitals use free or subscription-based situational awareness resources to learn about events in their area that have the potential to impact operations or create a patient surge.

Free Resources

- **Metropolitan Resilience Network (MRN) Dashboards:** An innovative public/private initiative led by the International Center for Enterprise Preparedness at NYU that enables stakeholders to access information on

shared threats such as severe weather, flooding, utility outages, cyberattacks, terrorism, and other hazards. MRN dashboards monitor threat-specific information to provide real-time statuses on critical infrastructure and public safety alerts.



<https://www.swanislandnetworks.com/aboutpage/about-the-mrn/>

Subscription Resources

- **Breaking News Network (BNN):** Provides real-time notifications of news events such as fires, accidents, shootings, and transportation incidents. Alerts can be sent to desktop or mobile devices and can be customized by geography or incident type, to fit a hospital's needs.



<http://breakingnewsnetwork.com/>

- **Dataminr:** Monitors social media traffic for early indications of high-impact events and critical breaking news. Alerts can be customized by geography or incident type. Acuity, GNYHA's for-profit subsidiary, has a group purchasing agreement with Dataminr that allows GNYHA and Acuity members to access preferred pricing on its services. To learn more about the agreement, please contact Barbara A. Green, PhD, Senior Vice President, GNYHA Ventures, at green@gnyha.org.



<https://www.dataminr.com/about>

- **First Responder Wireless News:** Delivers instant breaking news alerts and real-time notifications about fire, police, and rescue services, plus traffic and weather notifications.



<http://www.1rwn.com/index.aspx>

Other Information Sources

- **Ambulance Crews:** Hospitals may receive pertinent information about an emergency situation from ambulance radio transmissions.
- **Police Officers:** Police officers entering the hospital or ED can relay important information to hospital staff, and provide updates based on additional information received on their radios.
- **Self-Evacuating Patients:** Most MCI patients arrive at the hospital on their own, rather than via EMS. As many as 80% of patients arrive via means other than ambulance transport, according to research on large-scale MCIs.³ These patients and their companions can provide information about an event.

Hospital MCI Notification

In many jurisdictions, EMS will notify hospitals near an MCI to either query about their ability to accept patients or alert them that the ED may receive patients. Notification protocols differ by jurisdiction and may be provided by radio, phone, or electronically. For example, in Erie County, NY, 911 dispatch uses medical emergency response system (MERS) radios to notify hospitals of critical events such as an MCI. Each hospital ED has a base station that receives and transmits messages.

In New Jersey, hospital notifications are shared via EMS Regional Dispatch Centers. After receiving information about an MCI directly from EMS, staff at the Regional Dispatch Centers contact area hospitals to tell them about the incident and ask how many patients they can receive. In the Hudson Valley, Westchester County's Office of Emergency Management maintains a dashboard with ED status information for hospitals in a seven-county area. Hospitals are notified when large incidents occur and asked to update their ED status information, which then informs EMS transport decisions. In 2016, New York City enacted new pre-hospital-to-hospital notification protocols that rely on four MCI levels and corresponding fixed patient allotments. More information about these protocols can be found on [PAGE 12](#).

Regional entities and other types of organizations may directly notify a hospital ED about a nearby MCI. Hospitals should understand their jurisdiction's notification process and build internal notification and communication plans accordingly. A box on [PAGE 15](#) contains more information on this planning process.

Considering how rapidly MCIs can evolve, and how EMS often transports only a portion of MCI-related patients, hospitals should not rely solely on notifications from EMS agencies before activating emergency plans. Plan-activation triggers should be decided beforehand and should be based on information from multiple sources.

NYC Hospital Emergency Radio Network Outgoing Message Program

NYCEM Watch Command tracks local, regional, and national incidents affecting New York City 24/7. Since 1999, all 911-receiving hospitals in New York City have been connected to Watch Command via an 800-megahertz radio network. The radio network is the communication mode of last resort for hospitals, used only when all other forms of outgoing communication have failed. Radios are typically stored in the ED, at a security checkpoint, or in any appropriate area that is monitored 24 hours a day.

In the event of an incident that requires a significant response from the Fire Department of the City of New York (FDNY)—defined as a 10-60 incident, or a Level C or Level D MCI (see box, "[HOSPITAL MCI NOTIFICATION IN NEW YORK CITY](#)")—NYCEM Watch Command transmits a series of messages via the NYC Hospital Emergency Radio Network. These provide hospitals with situational awareness of incidents that could produce an influx of patients.

[APPENDIX D: HOSPITAL EMERGENCY RADIO OUTGOING MESSAGE PILOT PROGRAM](#) contains more information.

Hospital MCI Notification in New York City

In New York City, FDNY manages the EMS system and defines an MCI as any incident with the potential to produce five or more patients. FDNY's Emergency Medical Dispatch (EMD) uses reports from FDNY officers on the scene, 911 calls, and other sources to determine whether an incident is an MCI. When an incident is declared as such, additional FDNY resources can be quickly deployed to the scene.

MCI Levels and Fixed Patient Allotments

FDNY began using a four-level categorization system for MCIs in 2016 to inform EMS patient transport decisions and provide hospitals with additional situational awareness. The levels are:

- A: Minimal to Moderate
- B: Significant
- C: Major
- D: Catastrophic

Each level requires FDNY to alert a certain number of hospitals in the area and is associated with pre-determined numbers of patients that hospitals should be prepared to receive from EMS during the MCI. These numbers do not include injured individuals who may come to a hospital's ED on their own.

FDNY's EMD personnel determine the incident level, then EMD dispatchers begin notifying area hospitals. EMD also shares hospital notification information with FDNY personnel at the scene who oversee patient transport from the site.

EMD Notification Calls to Hospital EDs

When EMD notifies a hospital ED, they will provide the following:

- MCI level
- Incident location
- Nature of the incident (e.g., a fire or motor vehicle crash)
- The kind of patients involved, if known (e.g., adult or pediatric)

As EMD learns more, they may upgrade or downgrade the MCI level. If the change is expected to alter the estimated number of patients sent to a particular hospital, then that hospital will be notified via another call. These numbers only include patients transported by EMS to the hospital; other patients may arrive on foot or in private vehicles.

If two MCIs occur near a single hospital that is likely to receive patients from both incidents, then that hospital will receive separate calls for each incident.

The hospital will receive a "stand down" notification call from EMD when no additional patients are expected. If the hospital has received patients from more than one MCI in the vicinity, then the stand down call will be made when no additional patients are expected from the final incident.

[APPENDIX E](#) contains details about the EMS-to-Hospital Response Process for MCIs. A detailed analysis of the protocol's first year can be found in [APPENDIX F](#).

INTERNAL NOTIFICATIONS AND ACTIVATION

When hospital staff learn about an MCI nearby and believe that it will impact the hospital, they will need to make several key decisions quickly to increase the facility's readiness for the potential patient surge. Depending upon the nature and location of the incident, patients could begin arriving minutes after the event occurs. Therefore, facilities are encouraged to develop clear response triggers and protocols in advance to speed response decision-making. Facilities are also encouraged to train personnel and exercise response protocols frequently.

Hospitals use distinct terminology in MCI response plans. Some may call an internal disaster code to activate certain plans, and others may activate an MCI, trauma, or patient surge plan. Each plan also may be tiered, with each tier alerting or activating various parts of the facility. Whatever the name of the code or plan, tying its activation to broader facility structures and systems is critical, such as activating the Hospital Command Center, the HIMT, and the HICS. For facilities in a larger health system, appropriate notification of centralized Emergency Management functions is critical.

Activating EOPs Using the "10-Minute Rule"

To balance the need to follow the chain of command

before activating a facility's EOP with the need for timely preparation, one GNYHA member system uses the "10-Minute Rule": If the administrator-on-call is paged to activate the EOP and does not respond within 10 minutes, the plan automatically activates. The 10-Minute Rule recognizes that hospitals may have very little time before patients begin to arrive and allows staff to focus on essential preparations rather than trying to reach an administrator for approval.

Hospitals may also elect to allow staff on duty to activate an MCI plan without administrator approval. As hospitals receive additional information about an MCI, they can de-escalate plans. Delaying the activation of the response plan can make it difficult for a hospital to catch up. It is important that plans detail initial steps the ED and other key departments should take within the first 10 to 15 minutes of activation. This is discussed in detail in [CHAPTER 2: PATIENT TRIAGE](#).

Using a HICS Board in the ED

A trauma hospital in New Jersey began using a HICS board to help its ED staff know their role when a disaster plan is activated. At the beginning of each shift, key HICS roles are filled with staff from that shift. Training and response aids align with the information on the board. See [PAGE 14](#) for an HICS board example.

Key Questions to Inform Activation Planning and Decision-Making

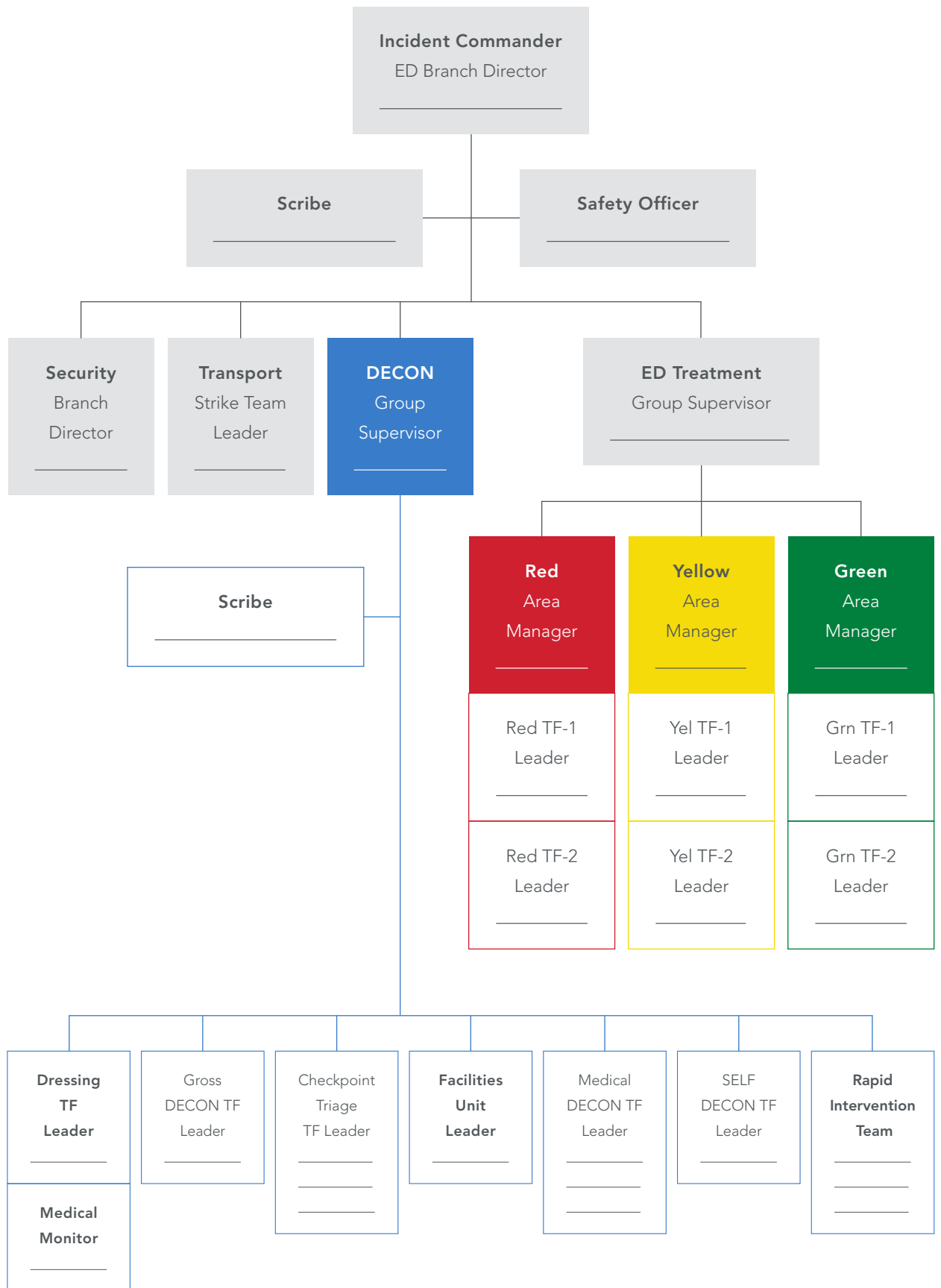
The following questions can help develop activation and decision-making protocols and procedures:

- Who is monitoring government and commercial information-sharing resources? Are they monitored 24/7? If an incident occurs that could impact the hospital do the individuals monitoring information sources have a clear process for internal notification and escalation?
- If the hospital is in a jurisdiction that has standardized MCI notification protocols, who within the facility receives them? Do staff know what to do when the information is received?
- What initial steps will inform activation decisions? Who will decide whether to activate facility MCI response plans? Will decision-making be different at night or on weekends versus during business hours?
- If the facility activates its MCI response plan, which departments and key roles will be involved? How will they be notified?
- Does the MCI response plan have tiers or levels? If so, how are they determined? And how do activations and initial actions differ per level/tier?
- How will decisions on HIMT activation be made? Decisions on Hospital Command Center activation?

Example HICS Board

On-Call IC: _____

On-Call AOC: _____



In New York City, many hospitals have developed tiered MCI response plans tied to FDNY's MCI levels

A through D. Below is a synopsis of various actions that hospitals may take for each FDNY MCI level.

Internal Actions for Various MCI Levels	
Learn of nearby incident, but no notification is received	<ul style="list-style-type: none"> • Seek information and updates via hospital emergency radios, Notify NYC e-mails, and other credible sources • Weigh the information against the credibility of the sources • Decide to activate or remain on standby based on available information
Minimal to Moderate MCI (NYC Notification: Level A)	<ul style="list-style-type: none"> • Seek information and updates via hospital emergency radios, Notify NYC e-mails, and other credible sources • Assess current ED status—the number of critical and non-critical patients, and staffing levels • Review facility's fixed allotment numbers • Anticipate how ED space could be cleared if needed for incoming patients (see PAGE 27 for more information); anticipate likely injuries and other considerations based on available incident information (i.e., building collapse vs. fire) • Enhance monitoring for critical patient notifications; if anticipating critical patients, begin assembling needed resources based on information provided via notification call and ambulance crew notifications • Assign a staff member to monitor information sources, watching for incident escalation
Significant (NYC Notification: Level B)	<p>Level A actions, plus:</p> <ul style="list-style-type: none"> • Alert key staff/functions beyond the ED, including senior leadership; see PAGE 18 for more information • Activate HICS (activation level will depend on what is known about the incident) • Request pre-determined clinical supplies to be delivered to the ED (i.e., trauma carts) • Activate disaster registration protocols • Activate lockdown procedures • Prepare areas for: media, law enforcement, family members, and other external groups likely to arrive
Major (NYC Notification: Level C)	<p>Level B actions, plus:</p> <ul style="list-style-type: none"> • Activate procedures to keep and recall staff • Alert staff in OR to pause cases, if safe, and hold all elective cases • Activate procedures to clear space in inpatient units • Activate procedures to alert and integrate clinical and non-clinical departments into response
Catastrophic (NYC Notification: Level D)	<p>Level C actions, plus:</p> <ul style="list-style-type: none"> • Redirect all hospital resources to maintain the facility's safety and security, and meet the immediate and intermediate health and medical demands of the incident • Activate rapid discharge procedures for the ED and inpatient units

Notifying Hospital Staff of an MCI

Hospitals' mass notification systems that share information with employees should be integrated into MCI response plans, and should use any functionalities that allow for pre-determined groups tied to activation levels and pre-developed notification language. Many systems have bidirectional communication capabilities, allowing individuals notified to share their availability within specific timeframes such as within 15 minutes, 30 minutes, one hour, or to reply that they are not available.

Mass notification systems also should be used to more broadly share situational awareness with facility employees. During large responses, many employees may reflexively want to go to the facility to assist. It is paramount to deliver clear messages about which staff are needed immediately, versus who is needed on a later shift. Any safety and access considerations that incoming employees need to know about should also be addressed.

While considering staff notification protocols, plans should also provide a place for existing staff who show up spontaneously, or for staff who choose to stay and help after their shifts have ended. These individuals can form a labor pool to be drawn upon as needs arise.

Response Aids

Hospitals could develop tools or checklists to assist staff with critical initial actions. Such tools may include the following:

- MCI notification checklist to detail initial actions for the person receiving the notification based on MCI level or information received. Many New York City hospitals have integrated these actions into the patient fixed allotment poster displayed in the ED.
- Pre-scripted activation messages and pre-determined groups to receive them.
- Procedure checklists for key departments involved in response, such as the ED, Admitting, blood bank, and OR coordination.

APPENDIX A contains sample response aids.

PREPARING THE ED AND OTHER KEY DEPARTMENTS INVOLVED IN MCI RESPONSE

Based on the available information about the nature and location of the incident, hospital staff will need to make assumptions about the types of injuries patients will likely have, and then begin assembling the staff and resources to manage these anticipated injuries.

Hospital staff will also need to think about safety and security considerations based on what is known about the incident. For example, could the incident be criminal or terrorism-related, or are there contamination concerns?

The chart on PAGE 17 reviews the types of injuries associated with various incident types.

Integrated Response Planning

While the ED is the initial focal point in an MCI, many other departments will play critical roles. The success of the response will largely depend on how rapidly other departments can support the ED, pull critical patients into other areas of the hospital, and activate secondary transport procedures—either for low-acuity patients who can be treated in other facilities or high-acuity patients whose needs the facility cannot meet. GNYHA's *Integrated Explosive Event and Mass Casualty Event Response Plan Template* is another resource that can help different departments consider their roles in an explosive event or MCI, and how those roles would interact with other parts of the hospital.

Following is a list of departments and possible key response actions. More detailed information is also available in CHAPTER 3: CLINICAL MANAGEMENT.



<https://www.gnyha.org/tool/integrated-explosive-event-and-mass-casualty-event-response-plan-template/>

ANTICIPATED INJURIES PER MCI SCENARIO⁴

MCI Category	Blunt Trauma	Penetrating Trauma	Burns	Crush	Exacerbation of Chronic Disease	Gastrointestinal Illness	Respiratory Impact	Submersion Injury	Infected Wounds	Contaminated Wounds
Chemical			X				X			X
Biological					X		X			
Radiological			X							X
Nuclear	X	X	X	X	X	X			X	X
Explosive	X	X	X	X			X		X	X
Tornado	X	X		X					X	
Hurricane	X	X			X	X	X	X	X	
Flooding	X	X					X	X	X	X
Earthquake	X	X	X	X	X	X	X		X	
Wildfire			X				X			
Plane Crash	X	X	X				X			
Bus Crash	X	X		X						
Major Motor Vehicle Collision	X	X	X	X						
Mass Shooting	X	X								

Clinical Department	Key Response Actions for Consideration
Critical/Intensive Care	<ul style="list-style-type: none"> Follow rapid patient discharge protocol and discharge patients to step-down units or other facilities Send senior staff person to ED to direct patient flow to the intensive care unit (ICU) and ensure communication flow Identify alternate spaces for critical patients awaiting ICU beds Establish communication pathway for off-duty and incoming staff to receive updates and assignments
Surgery	<ul style="list-style-type: none"> Cancel all elective and non-essential procedures Sort surgical patients into cohorts based on specialty; bundle procedures by injury type Stabilize and transfer patients who cannot be treated at the current location, prioritizing control of bleeding Establish communication pathway for off-duty and incoming staff to receive updates and assignments
Anesthesiology/ Perioperative Services	<ul style="list-style-type: none"> Deploy Anesthesiology/Perioperative staff in other areas of the hospital to assist with triage Prepare unit to receive overflow from ED, if part of incident response plan In coordination with Critical Care staff, identify alternate spaces for critical patients awaiting surgery (e.g., Surgical Intensive Care Unit, ICU, Pediatric Acute Care Unit) Establish communication pathway for off-duty and incoming staff to receive updates and assignments
Nursing	<ul style="list-style-type: none"> Designate nurses to report to ED and assist with patient care and triage, including alternate care locations for less acute patients Assign nurses to monitor and document patient information until handoff to OR, ICU, or other inpatient areas Deploy nurses to OR for additional support Deploy nurses to inpatient units and surge areas to re-triage, monitor, and treat patients Establish communication pathway for off-duty and incoming staff to receive updates and assignments
Radiology	<ul style="list-style-type: none"> Position one or more Radiology technicians in ED to perform examinations with portable equipment Clear all elective and non-emergency cases and move all non-imaging work out of CT rooms Establish communication pathway for off-duty and incoming staff to receive updates and assignments
Blood Bank	<ul style="list-style-type: none"> Bring pre-determined cache of blood products to ED upon notification of MCI Monitor blood product availability; notify blood supplier about incident and possible need for priority re-stock Recover unused blood products issued to inpatient wards and redistribute as needed Send senior Hematology and Transfusion staff to support ED and ORs Encourage use of tourniquets and hemostatic bandages where possible to reduce use of blood products Establish communication pathway for off-duty and incoming staff to receive updates and assignments

Clinical Department	Key Response Actions for Consideration
Laboratory	<ul style="list-style-type: none"> • Postpone all elective and non-essential tests • Monitor and supplement lab supplies for anticipated high-volume tests based on incident and injury types • Identify a Laboratory Reviewing Officer to reassess patient information and minimize unnecessary tests • Establish communication pathway for off-duty and incoming staff to receive updates and assignments
Internal Medicine	<ul style="list-style-type: none"> • Mobilize Hospitalists to conduct rounds for rapid patient discharge • Identify Triage Leaders to re-assess patients brought to inpatient floors • Deploy Pediatric and OB/GYN clinicians to support care for children and pregnant patients in ED, OR, and ICU • Establish communication pathway for off-duty and incoming staff to receive updates and assignments
Respiratory Therapy	<ul style="list-style-type: none"> • Designate one or more therapists to support ED intubations • Deploy staff for airway management in OR and in alternate spaces where critical patients are awaiting surgery • Designate staff to accompany Patient Transport staff and support transport ventilation when necessary • Establish communication pathway for off-duty and incoming staff to receive updates and assignments
Mental/Behavioral Health/Social Work/Child Life Services	<ul style="list-style-type: none"> • Activate a mental/behavioral health space where distressed individuals can receive support • Mobilize teams to walk around ED, surge, evacuation, and waiting areas to offer Psychological First Aid (PFA) and support • Monitor patients, family, and staff for signs of distress, and when possible move them to the pre-determined mental/behavioral health area where the medical team can triage and care for patients with acute physical injuries • If an incident includes children, designate “caretakers” to accompany them through ED, imaging, and treatment until they are reunified with family members • Set up a Pediatric Safe Area, if needed, for unaccompanied children or children whose parents are undergoing treatment or are unavailable • Deploy social work/child life staff to patient information/family reunification center • Designate mental/behavioral health (e.g., Psychology, Psychiatry, Social Work) staff to participate in ED and other initial intake areas’ triage teams to execute mental/behavioral health triage and other treatment- and referral-related activities • Put plans in place to support staff recovery • Establish communication pathway for off-duty and incoming staff to receive updates and assignments
Decontamination Team (if needed)	<ul style="list-style-type: none"> • Designate primary and secondary decontamination areas • Direct patients to decontamination areas • Prioritize, segregate, and decontaminate contaminated individuals and their belongings • Segregate contaminated vehicles, equipment, and supplies • Monitor facility and staff for contamination

Non-Clinical Department	Key Response Actions for Consideration
Emergency Management/HIMT	<ul style="list-style-type: none"> • Gather initial intelligence • Activate disaster code, MCI plan, or surge protocol • Activate appropriate HICS sections, and complementary emergency plans and procedures • Stand up Hospital Command Center • Monitor news and social media outlets for updates • Oversee initial outreach to first responders and other government response partners • Notify hospital and health system leadership
Administrative Leadership	<ul style="list-style-type: none"> • Notify all staff of disaster/emergency activation and staffing expectations • Prepare to assist with non-clinical functions, such as patient decompression, family reunification, secondary transport, and media management • Designate department to establish a family reunification/support area and complementary operations, and provide resources as needed • Establish communication with nearby health care facilities to coordinate care and transfer of patients, staff, and supplies
Admitting/Registration	<ul style="list-style-type: none"> • Activate emergency patient registration and tracking • Designate staff members as scribes to document clinical information in real time • Coordinate with clinical staff and family reunification/family support staff to update patient information and merge with prior records, if available
Bed Management	<ul style="list-style-type: none"> • Support rapid patient discharge and rapid turnover of rooms • Support rapid movement of patients from ED to inpatient areas
Pharmacy	<ul style="list-style-type: none"> • Send one or more staff to ED to ensure adequate medication supplies • Expedite processing of medication for discharged patients • Deploy staff to ED, ICU, and OR to support rapid medication availability • Designate staff to document all medication use during response
Materials Management	<ul style="list-style-type: none"> • Activate tracking of equipment and supplies • Conduct rapid inventory and fully stock departments with supplies, if possible • Deploy pre-stocked and pre-positioned carts and educate staff on location of carts • Document any new incoming materials, including by type and source • Monitor supply levels and communicate with suppliers and distributors about anticipated needs
Patient Transport	<ul style="list-style-type: none"> • Bring carts, wheelchairs, gurneys, and other essential supplies to ED/established entrances • Establish and maintain unidirectional flow of critical patients from ED to Radiology to OR/ICU • Designate staff to assist with distribution and delivery of donated materials throughout hospital
Environmental Services	<ul style="list-style-type: none"> • Surge staff to ED to help maintain cleanliness • Prepare rooms to accommodate patient influx • Implement safety practices in nontraditional/expanded care areas (e.g., sharps disposal, linen management, garbage disposal, biohazard control) • Implement rapid turnover of patient rooms to expedite patient throughput

Non-Clinical Department	Key Response Actions for Consideration
Hospital Police/ Security	<ul style="list-style-type: none"> • Initiate lockdown procedures, including reducing the number of entrances/exits • Secure the hospital's perimeter and assign personnel to all entrances/exits • Establish alternate traffic routing for emergency and non-emergency vehicles • Maintain clear entry points for emergency vehicles • Provide assistance in behavioral health area
Public Affairs	<ul style="list-style-type: none"> • Identify a Public Information Officer (PIO) and Social Media Monitor(s) • Prepare to address media inquiries about MCI and response • Monitor news and social media outlets for updates on incident and potential impact on hospital • Quickly identify and respond to hospital-related rumors in news or social media
Risk Management/ Legal	<ul style="list-style-type: none"> • Track need for waivers and make requests to regulatory authorities as needed • Review allowances for compliance with HIPAA, Emergency Medical Treatment and Labor Act (EMTALA) under emergency circumstances, and work to ensure compliance

Preparedness Beyond Clinical Operations

When developing and practicing EOPs, the focus is often on the ED, OR, imaging, and other clinical areas. But drilling and planning should also include other departments. Hospitals that responded to the October 1, 2017, shooting in Las Vegas highlighted the critical importance of patient registration and environmental services. There was a particular need to “triage” equipment cleaning and disinfection quickly to prevent cross-contamination when returning much-needed equipment to patient care purposes.⁵ These departments should be included in hospital-wide drills and when developing surge response plans.

CONSIDERATIONS WHEN THE HOSPITAL IS THE SITE OF EMERGENCY

When managing any emergency situation, a hospital's primary goals are to ensure patient and staff safety and continuity of care. When the hospital is the site of the emergency, the incident naturally becomes more complex and critical.

While the response will differ based on the type of incident, the hospital should be prepared to manage common challenges.

Response to the Incident

Whether the incident is a fire, a vehicle crashing into the facility, or an active shooter, during the acute response phase the focus will be to preserve life and ensure the safety of staff, patients, and visitors. Communication and safety procedures will be paramount during this phase.

Assessment of Impact

Once the immediate threat is over, hospital leadership must quickly assess the impact on hospital operations, and plan for curtailment of services, relocation of services, or some combination thereof.

Enhanced Security

Whatever the nature of the incident, the hospital will need enhanced security to manage the increased activity inside and outside.

Communication

Communication processes with the following stakeholders must also be quickly activated:

- Hospital staff—in-house and off-duty
- Law enforcement officers and investigators
- Regulatory agencies

- Members of the media
- Concerned friends and family of patients
- Outpatients, visitors, and community members

Clean Up

Depending upon the nature of the incident and the degree of damage, clean up and recovery will vary in length and complexity. Activities could involve renovations, environmental testing, and regulatory inspections.

Staff Recovery

In the aftermath of an MCI, a focus on staff recovery is particularly important when the hospital is the site of the emergency. The [CHAPTER 8: RECOVERY](#) will discuss the importance of repeatedly offering assistance and a variety of recovery services.

CHAPTER 2:

PATIENT TRIAGE

Understanding how the injured will most likely arrive at the ED after an MCI and having proper triage plans in place will help hospitals manage a sudden patient surge. This chapter discusses what EDs should prioritize in the first hour, methods to help staff focus when facing a surge of patients, triage considerations, and moving towards a disaster mindset.

PREPARING FOR PATIENT ARRIVAL

CHAPTER 1 discussed actions clinical and non-clinical departments should take when notified of an MCI. However, when preparing for the imminent arrival of MCI patients, the ED should be most concerned about mobilizing the OR, blood bank, and imaging. An ED director or physician-in-charge should contact these departments first, and staffing and resources should focus on those locations and the ED during the first hour.

Activating HICS and designating a formal command structure should also be done during that first hour, especially if the MCI appears to be large. Las Vegas hospital officials wished HICS had been activated earlier in the response and had stayed activated further into the recovery phase.

Helping Staff Focus in a Surge Situation

To help hospital staff remember the necessary steps to respond to an MCI, Nevada Healthcare Preparedness Partners adapted the “PENMAN” mnemonic, developed by Crafton Hills College in the 1980s to teach paramedics about scene safety.⁶ This is discussed in greater detail in [APPENDIX G](#), but briefly, the letters stand for:

- Personal and Personnel Safety
- Environment
- Number of Victims
- Mechanism of Injury
- Additional Resources
- Need to Evacuate

Using the “15 ‘til 50” Model to Prepare for Arrivals

Another model often used is “15 ‘til 50.” Developed by the California Department of Health, it has been used across the country to prepare for MCIs. In brief, when a hospital learns of a large-scale MCI, clinicians should expect to have 15 minutes before 50 patients arrive at the ED and should focus on preparations to meet the expected patient surge.⁷ While neither the “15” nor the “50” may turn out to be accurate, this model underscores the importance of rapid action in anticipation of patient arrivals.

PREPARING FOR PATIENT TRIAGE

Field triage will likely have been performed on patients brought in by EMS using the standard triage categories on [PAGE 24](#).

While field triage is extremely helpful, hospitals should anticipate the arrival of many patients without the benefit of field triage. Orlando Regional Medical Center is located less than a half-mile from the Pulse Nightclub. Following the June 2016 shooting there, many injured walked to the hospital. In fact, 36 patients arrived at the ED in 36 minutes.⁸ During the Las Vegas shooting, EMS made 24 transports to Sunrise Hospital & Medical Center versus 188 private vehicle transports bringing injured individuals to the hospital.⁹ Additionally, with the general increase in the use of ride-hailing services, hospitals should have policies in place addressing how to transport the injured or ill from private vehicles to the ED.

Emergency Department Preparation

As part of an MCI response plan, hospitals should designate areas for patient arrival and exercise their activation and use. If possible, stretchers should be lined up with the head-end lifted to ensure patients are properly placed.

Triage Color	Description
Red	<ul style="list-style-type: none"> • Serious injuries • Immediate life-threatening problems • Potential for survival • All viable infants (<12 months) are automatically Red-tagged
Yellow	<ul style="list-style-type: none"> • Serious injuries • Require care, but management can be delayed without increasing morbidity or mortality
Green	<ul style="list-style-type: none"> • Injuries • Require minimal or no care without adverse effects
Black	<ul style="list-style-type: none"> • Expired or expectant • Unlikely to benefit from scarce resources

New York City also uses an Orange designation that indicates an intermediate level between Yellow and Red during which critical patients can be further sorted.

Based on best practices emerging from recent incidents, hospital EDs should set up an initial triage area and a separate critical triage area further inside the ED. A senior physician paired with a nurse should lead triage efforts. Hospitals could consider providing triage training to clinicians who work on units other than the ED. In larger-scale MCIs, ED nurses and physicians will be needed to treat the surge of patients; therefore, bringing clinicians trained in triage from another part of the hospital could free up much-needed staff.¹⁰

The function of the initial triage area is to separate patients into Green, Yellow, and Red categories—and Orange, if the facility uses it. Patients tagged Green and Yellow should be sent to the appropriate areas of the ED or ancillary ED, if one is established. All critical patients should be brought to the critical triage area. This area will be the most challenging to manage, especially because needs will outstrip available resources, at least initially. Best practices for critical triage from recent events, most notably in Orlando and Las Vegas, include:¹¹

- Conducting gross triage by assessing breathing and speaking ability
- Immediately intubating anyone with vitals who is not breathing

- Inserting intraosseous transfusions (IOs) and beginning medications
- Performing bleeding control
- Separating and organizing patients by trauma type (i.e., head wound, chest wound, extremity wound)
- Keeping patients warm
- Noting changes in mental status or motor exams with mark on tag or forehead

As additional staff arrive, use personnel to perform triage, re-triage, and conduct life-saving measures.

Re-Triage

Patients deemed non-critical must be re-triaged frequently to monitor them for changes in their condition. Several clinical staff should be assigned to each patient care area to perform re-triage. This will also enable staff to prioritize patients for treatment in an environment with limited resources.

UNDERSTANDING THE SHIFT TO A DISASTER MINDSET

During a surge, patient needs initially will likely exceed available resources. Clinicians and hospital leaders must recognize this and shift to a disaster mindset

where the focus becomes “do the most good for the greatest number of patients.” Triage and re-triage is one aspect of this, and recognizing when clinical intervention will not longer benefit a patient. Because this change in mindset and its consequences are so difficult for clinicians, hospitals must introduce this concept in advance and continuously discuss, drill, and modify plans.

CHAPTER 3:

CLINICAL MANAGEMENT

While triage is essential to treating patients during an MCI, it must be coupled with strong clinical management protocols. This chapter discusses best practices for prioritizing critically injured patients, expanding ED space, and throughput considerations. Caring for special populations, including elderly patients and children, is also detailed.

CREATING CAPACITY AND ORGANIZING THE ED

Once a hospital receives an MCI notification or is anticipating the arrival of large numbers of patients based on other sources, ED staff should create space for those patients, which could involve several strategies, including:

- Rapidly discharging patients ready to go home
- Accelerating movement of admitted patients to an assigned bed or for transport to an inpatient floor
- Shifting low-acuity patients and non-emergent patients waiting to be seen to a pre-determined alternate area, such as a nearby clinic space or recovery area, or to an appropriate nearby facility, such as an urgent care center

Protocols and planning for these strategies should be developed beforehand, discussed with impacted departments, and tested.

A hospital's mass casualty response plan should include designating areas within the ED by injury severity, building on the ED's daily layout. Depending on the facility layout and use of fast-track or other low-acuity triage techniques, the hospital may want to designate a secondary ED for

Green-tagged patients and uninjured bystanders in its plan. This will create additional space in the main ED for higher-acuity patients. Planning for the designation of secondary or tertiary ED space should involve clinical and non-clinical staff, and facilities and environmental services staff. In Las Vegas, Sunrise Hospital & Medical Center sent Green-tagged patients with minor injuries to the nearby pediatric ED for treatment.¹²

An area should also be designated for patients likely to expire to receive palliative care, and a separate area for deceased patients. If morgue space in the hospital is limited, temporary morgue space should be identified beforehand. Considerations should include separate heating/cooling controls and secured access. Sunrise Hospital & Medical Center's endoscopy suite became a temporary morgue for more than a dozen fatalities.¹³



ED Expansion Tool: The New York City Department of Health and Mental Hygiene (DOHMH) created a tool that helps hospitals expand their ED and weigh supply and staffing considerations. The Emergency Department Capacity Expansion Tool (EDCET) features action and outcome steps to guide the process.

<https://www1.nyc.gov/assets/doh/downloads/pdf/em/edce-tool.pdf>



DOHMH Resources: DOHMH has also compiled many useful resources organized into five key areas—surge capacity, mass casualty planning, pediatric preparedness, chemical emergencies, and radiological emergencies.

<https://www1.nyc.gov/site/doh/providers/emergency-prep/hospitals.page>

Clinical Supplies

Many facilities create and store disaster carts or MCI carts that contain large quantities of supplies for treat-

ing trauma victims. These carts should be near the ED, with clear protocols for requesting and delivering them to designated areas within the ED. The ED may also create a standing order with the hospital's blood bank to immediately bring certain quantities of blood product to the ED when the MCI plan is activated. There will also be demand for additional stretchers and wheelchairs in the ED, given that many patients are expected to arrive on their own.

Pre-stocked carts can be deployed to other areas of the hospital that have been repurposed for patient treatment during an MCI. Hospitals that have pediatric EDs and that use pre-stocked carts should consider deploying a cart with pediatric supplies to the adult ED, and a cart with adult supplies to the pediatric ED, since pediatric and adult patients could present to either ED.

All EDs—whether specific to pediatrics or routinely used for children—should include the appropriate training, equipment, and supplies to manage critical and non-critical pediatric patients who arrive by non-traditional transport during MCI events.

Protocols should be in place to trigger the re-supply of high-demand clinical items. Because there may not be time for deliveries, arrangements with nearby facilities or other hospitals within a health care system may be more practical.

The Las Vegas shooting occurred late on a Sunday, when supplies of most items were low.¹⁴ Hospitals had previously established mutual aid agreements with other types of facilities in the region. This advance planning resulted in people carrying boxes of supplies from a long term acute care hospital across the street to a hospital treating patients from the MCI. Other staff picked up supplies from outlying hospitals before reporting to work. Hospitals' 96-hour disaster supply plans did not account for the volume of bed linens that had to be changed frequently, and many supplies were exhausted within four hours. In a cata-

strophic event, even routine supplies like pens may run out if they become contaminated.

Using Kits for Rapid Care

Las Vegas pharmacists and respiratory therapists grouped supplies by procedure type, creating kits for inserting chest tubes, rapid sequence intubation, and administering blood products.¹⁵ Also, staff quickly realized that the volume of patients would overwhelm medication dispensing machines, so medicines were set out on carts for staff use.

Use Planning to Remove Artificial Barriers

In developing response plans, consider how an incident's timing could create supply access problems. For example, in Las Vegas, warehouse access at one hospital was delayed because it was only staffed during the week. At another facility, staff could not access extra triage tags because they were locked in a staff member's office.¹⁶

PRIORITIZING CRITICAL PATIENTS

Some patients with the most severe injuries may not arrive at the hospital in the immediate aftermath of the event, as it will take time for first responders to get to the scene, triage, and transport patients. In some MCIs, such as train or car accidents, first responders may need to extricate patients from the wreckage first.

Communication with EMS at the scene will hopefully inform the facility about how many critical patients to expect and the nature of their injuries, but an ED will likely first see less severely wounded patients who walk in, or people with severe injuries who are brought by private or police vehicles without prior notice or triage.

According to the Assistant Secretary for Preparedness and Response (ASPR), unstable patients with abdominal injuries should be the OR's top priority, then chest injuries that are not responsive to chest tubes

and decompression. The priority for neurology cases should be evaluated on a case-by-case basis. Other high-priority cases include vascular injuries in which a limb may require amputation.¹⁷ If bleeding can be safely controlled without surgery, clinicians should try those measures first to reduce demand on the OR.

When triaging patients, clinicians should consider delaying surgery for those with non-life-threatening injuries such as broken bones, to keep the OR available for more critical injuries. These could include injuries from incidents not related to the MCI, as people will continue to present or be transported to the hospital. Patients whose surgeries can safely be delayed can be admitted to inpatient floors to await surgery in the following days. Overwhelmed hospitals should consider transporting stable cases awaiting surgery to another facility.

“Damage Control” Surgeries Can Free Up Capacity

Depending on the anticipated number of critical patients, surgeons may have to perform quicker “damage control” operations to address major injuries to stabilize a patient initially, addressing other injuries with subsequent surgeries days later. These damage control operations will allow providers to operate on more patients and potentially improve outcomes for a greater number of people. Use of a damage control surgical strategy is most appropriate in incidents involving high-velocity firearms and explosive devices, which result in large numbers of critical patients. All elective surgeries for the following day should be cancelled; non-clinical staff can help notify patients and doctors affected by these cancellations.

Mental Health Mobilization

Behavioral health and social work staff should begin circulating in patient care, waiting, and entrance areas to offer PFA to people in distress, which is discussed in detail in [CHAPTER 8: RECOVERY](#). Emergency plans should include a separate, secluded space where distressed and disruptive people can be moved and treated for physical and emotional issues. This space

should include behavioral health, clinical, and security staff.

IDENTIFYING AND REGISTERING PATIENTS

Patient identification and registration can be one of the most challenging aspects of MCI response, so planning to support patient safety and family reunification is critical. Conducting basic registration using the electronic medical record (EMR) within a reasonable timeframe after the patient arrives is achievable if key departments, including the ED, Patient Registration, and Information Technology are included in the planning process and have tested established protocols together during exercises and drills.

Modified Disaster Registration within the EMR

Many EMR systems contain a disaster module that supports a shortened registration process and that associates patients with a particular incident for internal and external tracking purposes. The disaster module should have space for a patient’s first and last name, and space for an alias first and last name to be used if a patient’s identity is unknown upon arrival. When modifying a disaster module, the facility must balance speed with the information required to safely provide immediate care to the patient. The needs of key departments—including OR, ICU, labs, radiology, and the blood bank—should also be considered.

Another helpful feature for the EMR could be adding additional slots to inpatient floors. In a large-scale MCI, patients admitted to inpatient floors may need to be doubled or tripled up in patient rooms or placed in hallways. Having these additional spaces in the EMR would allow patient tracking and documentation to continue.

Unidentified Patients

In a large-scale MCI, a facility likely will treat patients unable to communicate with staff and who have no identification. In the aftermath of the mass shooting in Las Vegas, Sunrise Hospital & Medical Center initially treated more than 90 unidentified patients.

Facilities should have an unidentified patient naming convention and complementary registration and tracking processes to support patient care, safety, and family reunification.

In the dense New York City region, a large incident likely will result in victims being treated at multiple hospitals. One concern from a jurisdictional level is the ability to create one overarching victim manifest to support local and regional family assistance and reunification processes. GNYHA led a collaborative process that produced the *Unidentified Patient Naming Convention Guidance for Hospitals*. This guide encourages hospitals to adopt a naming convention that attaches unknown patients to the initial treating hospital, reducing the likelihood that victims at different facilities will have the same or similar names. The document contains specific suggested first and last name schemas for every GNYHA member hospital in New York, New Jersey, and Connecticut. It also underscores the importance of including identifying features and creating a target to register patients within 20 minutes of arrival. The full document, including a link to naming convention suggestions for each hospital, is in [APPENDIX H: HOSPITAL ABBREVIATIONS AND ITEMS IN SUPPORT OF REGIONAL UNIDENTIFIED PATIENT NAMING CONVENTION](#).

When a patient is identified, new wristbands should include their actual name and the alias given when they arrived. This will ensure any lab tests or imaging studies done while the person was unidentified are correctly associated with the patient. EMRs should also have space for both names so the record remains complete.

Use of Disaster Packets and Disaster Tags

Disaster medical record packets with basic documentation, an assigned medical record number, and a patient bracelet could be kept on hand. Hospitals that maintain such packets are advised to keep 150–200 on hand. Using the naming convention above, hospitals can pre-print names for unidentified patients.

Disaster medical record packets can also include labeled blood tubes, IV start kit and catheters, and request forms for blood.

When registering patients during an MCI, use of a disaster identifier to associate patients with the event is recommended. The identifier should include the MCI, the date, and the time closest to the hour when the first patient arrived. Sometime after the event, government agencies may ask hospitals to retroactively add a name for the incident such as “Pulse Nightclub Incident.”

Connecting patient registration protocols with family reunification planning is important. Please see [CHAPTER 5: SUPPORTING FAMILY AND FRIENDS IN THE AFTERMATH](#) for more information.

Creating an Incident-Related Patient Manifest

Patient registration staff should develop and maintain a manifest of incident-related patients, both identified and unidentified. To the extent possible, it should include anyone who has received or is receiving care, and their disposition, including those: treated and released, transferred, in the ED, admitted, and deceased. This manifest should be shared with jurisdictional authorities responsible for family reunification and the medical examiner (ME). More information about sharing during emergency incidents can be found in [CHAPTER 7: LEGAL AND REGULATORY CONSIDERATIONS](#).

MOVING PATIENTS TO DEFINITIVE CARE

Plans for responding to a large-scale MCI should emphasize moving patients in a single direction, starting in the ED for triage and stabilization, then transporting them to another place such as the OR, ICU, an inpatient floor, discharge, or transfer to another facility. Smooth throughput, even with a surge of patients, is crucial. Las Vegas hospitals reported that the ability to triage patients and get them quickly into surgery saved lives.¹⁸

ASPR recommends having a staff member follow each patient from triage until the patient reaches an inpatient floor.¹⁹ Patients taken to inpatient floors should continue to be monitored for any status changes.

CT scans are a common chokepoint during MCIs, so hospitals should plan to mobilize available bedside imaging tools, including ultrasound, to reduce pressure on the Radiology Department and maintain uni-directional patient flow. Having radiologists or radiology technicians report to the ED to interpret images immediately is another option.

During the initial response, a senior member of the medical staff should, as ASPR describes it, “conduct the orchestra”²⁰ in the ED, rather than provide patient care. This person’s role should be to provide overall stability and direction. Some facilities deem this role the “Clinical Incident Commander.” This “conductor” should have an assistant to handle phone calls and other communications.

Staffing Considerations

When developing emergency response plans, how physicians can assist beyond their traditional roles should also be considered. ASPR notes that anesthesiologists, for example, could be tasked with re-evaluating and re-triaging patients following an initial triage in the ED. Anesthesiologists can provide pain management, augment ICU staff, and act as liaisons between the ED and OR, or with family members seeking loved ones.

Bringing in additional clinicians to assist with the response could be necessary. Within 40 minutes of learning of the shooting at Pulse Nightclub, Orlando Regional Medical Center brought on-call surgeons from other hospitals in its system. These surgeons were paired with Orlando Regional clinicians to perform procedures.²¹ In Las Vegas, obstetric and pediatric surgeons replaced scrub nurses and opened abdominal cases for other surgeons to then operate on.²²

Depending on the scale of the MCI, administrative staff from other parts of the hospital should expect to assist. At Sunrise Hospital & Medical Center in Las Vegas, non-clinical staff helped transport patients and cleaned rooms so other patients could use them. Administrative staff can help retrieve items from central supply, run other errands, and assist with family reunification.

Increasing Clinical Care Areas

In large-scale MCIs, inpatient units will need to be rapidly discharged. Patients needing to be admitted should be moved up to inpatient floors quickly to free up ED space for newly arriving patients, even if they must be put in hallways.

Pre-operative areas and post-anesthesia care units play important roles in managing patient surge. According to ASPR, one hospital used the ICU to evaluate and triage patients. The ICU was staffed with a team that included an intensivist, trauma surgeon, anesthesiologist, and support staff. Other departments with critical care capabilities—such as endoscopy suites, catheter labs, and interventional radiology—could be used to monitor patients.

Ventilators

Depending on the nature of the MCI and patients’ injuries, the number of patients needing ventilators could exceed supply. Some hospitals store stockpiled ventilators for local public health agencies or have extra ventilators in storage that are not in daily use. MCI plans should note these additional ventilators, and clinicians should know their location.

If the ventilators in storage differ from those in daily use, supplies and instruction sheets should be stored with the units to facilitate safe usage during an emergency. MCI training should include a periodic review of stockpiled ventilators so staff have a basic familiarity with them.

When stockpiled or emergency ventilators are not available, patients can share a single unit, doubling

its capacity. A 2006 Neyman and Irvin study used lung simulators to show that a ventilator could accommodate four lungs for a six-hour period.²³ In Las Vegas, Sunrise Hospital & Medical Center ED physician Kevin Menes, MD, put two patients of similar size on the same ventilator using “Y” tubing and doubling the tidal volume.²⁴

Secondary Transport

During a large-scale MCI that impacts multiple hospitals, secondary transport will become critical. Hospitals with trauma capabilities will likely transport lower-acuity patients to other facilities, and community hospitals will stabilize and quickly transport critical patients to appropriate facilities.

Because the EMS system will likely be overwhelmed, at least initially, hospitals should think through secondary transport options using hospital assets. For large health systems that include trauma and non-trauma hospitals, adaptations of day-to-day transfer procedures are an excellent start. In previous MCIs, hospitals have put Green-tagged patients on large vehicles for transport to other hospitals to free up resources for more severely injured patients. Volunteer ambulance companies and ambulette transport organizations could also help. Hospitals should develop relationships with these groups before MCIs occur, and seek their participation in larger-scale community exercises. Hospitals should also be familiar with jurisdictional transport assets and how to request them, as well as other jurisdictional processes for secondary transport.

While the requirements of EMTALA still apply during MCIs, the law recognizes that state or local response plans could designate specific hospitals to treat certain cases or conditions during emergencies. Therefore, it is unlikely CMS would impose sanctions for actions taken during such situations.²⁵ Hospitals should still strive to provide a medical screening examination and comply with EMTALA principles when possible. More information about complying with EMTALA

during an MCI can be found in [CHAPTER 7: LEGAL AND REGULATORY CONSIDERATIONS](#).

Patient Discharge

Consider designating a waiting area for patients who have been treated and discharged. Depending on the nature of the MCI, hospital access may be restricted, which could prevent people from leaving. Patients from out of town may have nowhere to go. Discharged patients who lost a loved one or were separated from friends or family also involved in the MCI should be connected to family assistance operations at the hospital or opened by a government agency. Staff should be designated to provide support and connect individuals to other services and resources as appropriate. Social workers and patient experience staff are well-suited for this role.

In Las Vegas, Sunrise Hospital & Medical Center allowed people to wait in the hospital’s auditorium, while University Medical Center transported discharged patients to a designated pick-up spot.²⁶ Providing a space where people can wait will free up rooms and allow clinical staff to focus on patients who require medical treatment.

Managing Patients with Grave Injuries

Recognizing when patients are expectant and that critical resources should not be expended on them is one of the most difficult aspects of MCI response. A facility’s mass casualty response plan should include a pre-designated area where expectant patients can get care and comfort.²⁷ Clinicians with pain management and end-of-life care expertise should be assigned to work in this area. There should be close coordination between staff here and staff responsible for family reunification and fatality management.

Fatality Management

A facility’s mass casualty response plan must include fatality management. The fatality management plan should be coordinated and consistent with the jurisdictional plan. Hospitals should be prepared to store

decedents longer than usual, given the likelihood that the local ME will be overwhelmed. The facility's fatality management plan should expand existing mortuary space. When selecting a location consider access controls, temperature controls, and distance to other operations.²⁸

If whatever caused the fatalities is criminal in nature, law enforcement investigators will likely need access to decedents. Basic charting of each decedent should be carried out in order of arrival; this information will be needed later to help with family reunification efforts and investigations involving the ME and law enforcement. Fatality management plans and operations must carefully coordinate with law enforcement and family reunification planning. Given the operational complexities of fatality management and the emotional burden, a facility should carefully consider which staff are assigned this role.



ASPR TRACIE No Notice Incident Tip Sheets: Based on interviews with clinicians who have responded to major MCIs, these sheets discuss fatality management, patient throughput, special considerations for trauma and non-trauma centers, and community management.

<https://asprtracie.hhs.gov/mass-violence#no-notice-incident-tip-sheets>



ASPR TRACIE Q&A: Developed after a webinar with clinicians who responded to the Las Vegas shooting, this document captures questions asked of the presenters and their responses. Topics include communication, supplies, patient management, and other lessons learned.

<https://asprtracie.s3.amazonaws.com/documents/no-notice-incident-las-vegas-webinar-qa.pdf>

Evidence Collection and Collection and Preservation of Personal Effects

Recovering victims' personal effects (PE) is critical, and also meaningful for families. PE are often items that the victim carried and may be the last items they touched. Examples include a wallet, purse, jewelry,

and clothing the victim wore. PE generally is significant for the next of kin and crime victims. These items are especially important in MCIs when death is sudden and violent. PEs fall into three types: retained as evidence, associated, or unassociated.

If the MCI is considered criminal in nature, law enforcement may want to collect available evidence from involved patients. If clothing must be cut off for patient care purposes, clinicians should avoid cutting through any holes in clothing that could be related to the event, and handle the clothing as little as possible.²⁹ Clothing should be placed into paper bags, if available, and sealed with the patient's name or alias if the patient cannot be identified. Consider stocking disaster carts with paper bags to facilitate evidence collection. A hospital staff member such as a security officer should monitor all bagged evidence until a law enforcement representative arrives to collect it. When multiple law enforcement

agencies are involved, additional coordination may be needed to ensure the correct agency gets custody of the evidence. Such coordination should be handled by the hospital staff member designated to work with law enforcement for the MCI.

Similar protocols should be used to preserve PE. State or Federal victim services advocates may use third-party vendors to clean and return PE to patients or family members at a later date. Preserving the PE of deceased individuals is especially important; not discarding or destroying it is a best practice.

Associated PE are items carried on an individual and recovered on them during the recovery of remains. These items could also be in close proximity to the victim or the victim's remains and may also be associated with a victim by name: credit cards, prescription bottles, or luggage with an identification tag.

Unassociated PE are items that are not or were not in physical contact with or in close proximity to a victim or to human remains, or do not have distinct identifying information to link them to a victim. Unassociated personal items could be mistakenly mixed with human remains recovered at the scene.

SPECIAL CONSIDERATIONS FOR VULNERABLE POPULATIONS

Hospitals are accustomed to meeting the unique needs of certain populations, including children, the elderly, people with special needs, and non-English speakers. Because the chaos of an MCI response could exacerbate these needs, MCI response planning should include how to meet the needs of these groups.

Children

Children accounted for about 22% of the US population in 2017,³⁰ and are more prone to injury and mental health disorders during MCIs for many reasons. Children lack motor skills and the cognitive skills to avoid exposure and attack. Children's size and physiology make them more vulnerable to chemical, biological, radiological, nuclear, and high-yield explosive agents, hypothermia, dehydration, shock, and death. Depending on the child's age, communicating the extent of their injuries may be difficult.

Another concern with pediatric victims is preserving the family unit. Triageing children and their families together is important for a child's mental health, as separation from parents and siblings greatly increases children's anxiety. For this reason, families should be sent as a unit to the triage color area appropriate for the most ill family member. However, if children and adult members of the family need immediate care (Red tagged), staying together may not be possible. Reunification and considerations for unaccompanied minors are discussed in greater detail in [CHAPTER 5: SUPPORTING FAMILY AND FRIENDS IN THE AFTERMATH](#).

If large numbers of children are involved in an MCI, response plans should enable older children to be

shifted to the adult ER and adult service lines, to increase capacity in pediatric units.³¹

Decontamination, if needed, should also be done with the family together whenever possible. In developing protocols for decontaminating children, be mindful that cold water could put them at risk for hypothermia, especially the very young. Blankets and other warming mechanisms and child-friendly, waterproof stretchers should be available to prevent hypothermia. Because of younger children's resistance to showers, and older children's modesty issues, decontamination for them could take longer. Soap and water should be used because they are safer for children than bleach or other chemicals.³²

Disaster response plans should consider designating "caretakers" to accompany lone children through the triage and treatment process until family members or guardians arrive, such as in a school bus collision. Child Life Services, social work, or other similar departments are well-suited for a leadership role in providing staff. Consideration should be given to using capable staff not participating in acute care of patients. In these cases, digital photos should be taken of the children to facilitate reunification.³³ Additional information about reuniting children with their families and keeping them safe while awaiting reunification is available in [CHAPTER 5: SUPPORTING FAMILY AND FRIENDS IN THE AFTERMATH](#).

The Elderly

Triageing elderly patients can be challenging; studies suggest that such patients are frequently under-triaged.³⁴ Vital signs that fall within normal ranges can mask serious issues for older patients injured during an MCI. Injuries that appear minor—especially during an MCI, when other patients may have much more traumatic injuries—could have a devastating impact on their health. Beta-blockers and other medications commonly taken by older people can also influence vital signs and mask signs of serious injury. Also, clinicians could attribute an altered mental state to

delirium or dementia, misdiagnosing shock or a traumatic brain injury. According to the American College of Surgeons (ACS), under-triage of senior citizens is “associated with a two-fold increase in the risk of death.”³⁵ ACS recommends that clinicians use a lower threshold for trauma activation for elderly patients.

While conducting triage, clinicians should consider how medicines such as Coumadin or co-morbid conditions could impact an injury. ACS notes that older patients who have traumatic injuries are more at risk for an adverse drug event, so obtaining an accurate list of a patient’s medications is especially important. Hospitals could consider calling in geriatric specialists, if available, when an MCI involves elderly patients.



ACS Committee on Trauma Geriatric Trauma Management Guidelines: Created to help clinicians treat elderly patients involved in a traumatic or MCI event.

<https://www.facs.org/~media/files/quality%20programs/trauma/tqip/geriatric%20guide%20tqip.ashx>



American College of Emergency Physicians curriculum: “Bombings: Injury Patterns and Care” was developed as a curriculum for clinical information on treating blast injuries.

<https://www.acep.org/blastinjury/>



Chemical Hazards Emergency Medical Management Program web page: Part of the US Department of Health and Human Services, this web page describes how special populations may be more vulnerable to chemical exposures and provides guidance for decontaminating people in these special populations.

<https://chemm.nlm.nih.gov/specialpops.htm>

Individuals with Special Health Care Needs

Individuals with special health care needs who are involved in an MCI and present at the ED should be triaged as others are. Clinicians should check for bracelets that have more information about a person’s condition or needs. A person with a pre-existing special health care need can be triaged into a Green

area if their MCI-related injury warrants it. A technology-dependent person experiencing a technological failure may need to be triaged into Yellow or Red categories.

Some people, such as those with autism, have a higher tolerance for pain. That, coupled with communication barriers, could mask serious injuries.³⁶ When treating people on the autism spectrum, minimize physical contact. If a physical exam is necessary, start at the extremities and work toward the trunk and head.

Clinicians must speak clearly, directly, and literally, and allow extra time for responses when communicating with people with special health care needs

such as hearing or cognitive impairments, or autism. This can be challenging in a busy ED during a patient surge, but properly triaging and treating patients is important. Work with caregivers or family members, if they are available, but do not exclude the patient from the conversation.

Non-English Speakers

Translators are needed when injured individuals do not speak English or have limited English proficiency. Many hospitals contract with companies for over-the-phone or video interpretation services, but accessing those services may be difficult when telecommunications are affected by the MCI.

If an MCI incident involves a number of individuals from a particular linguistic or ethnic group, the hospital could contact a community-based organization with ties to or knowledge of that community to address cultural issues that could impact ongoing treatment and care. As in other treatment situations, clinicians should avoid using children and families as translators unless absolutely necessary.



Massachusetts General Hospital's David King, MD, (front left) leading the Tertiary Survey on a Grand Scale with fellow clinicians after the Boston Marathon bombing.

ENSURING CONTINUITY OF CARE WITH TERTIARY SURVEY ON A GRAND SCALE

In the aftermath of an MCI, critically injured patients may receive care from multiple providers across many departments or from other facilities. High numbers of complex cases and detours from daily protocols could cause the loss of important patient information. To mitigate this, trauma surgeons in New York and Boston have developed the Tertiary Survey on a Grand Scale concept. After completing initial surgeries, all physicians and nurses involved in the care of critical patients meet to discuss each patient individually, notating all injuries, procedures performed, labs, imaging, and ongoing clinical concerns. This establishes a complete clinical picture of each patient to inform future care.

CHAPTER 4:

SAFETY & SECURITY

Any incident that results in an influx of individuals to the hospital merits a security response as a precaution. This can be a challenge, as hospitals are large facilities that often have multiple entrances. This section discusses immediate actions hospitals should take, along with law enforcement coordination to protect people in the facility, and decontamination considerations.

IMMEDIATE SECURITY ACTIONS

If the hospital anticipates—based on media reports, formal notifications, or other means—a substantial number of patients will be arriving, it should immediately trigger specific security protocols, which could include:

- Assigning additional hospital security personnel to the ED
- Augmenting security staff with other pre-designated staff and equipping them with the necessary equipment and just-in-time training
- Reducing the number of entry points to the main hospital and ED, and installing visible security personnel to provide direction at each entrance
- Communicating enhanced security procedures to current staff, staff coming to assist the response, and staff on the next scheduled shift
- Securing ambulance entry points and ambulance bays
- Designating and securing clear pathways outside the hospital for the arrival of private vehicles bringing injured people, and wounded individuals who arrive on foot

The facility also should be prepared for the arrival of:

- Members of the media
- Public officials
- Friends and family of the injured
- Law enforcement representatives

Pre-establishing areas for these groups, and putting security procedures in place to guide them to the appropriate areas is critical. Additional information about media management and family reunification can be found in [CHAPTER 5: SUPPORTING FAMILY AND FRIENDS IN THE AFTERMATH](#).

LAW ENFORCEMENT SECURITY PRESENCE AND COORDINATION

Law enforcement coordination, like many other areas of emergency preparedness planning, should begin before an MCI. Officers from the local precinct or police department should be familiar with the hospital's layout and emergency operations procedures. Giving tours to local law enforcement and inviting them to participate in drills and exercises helps build a strong working relationship before MCIs occur.

Enhanced Security Plans

When a hospital activates for a large MCI, staff should contact the local police station to inform them of the hospital's current or anticipated situation and to request security assistance. However, depending upon the nature and magnitude of the incident, jurisdictional law enforcement resources may not be immediately available. Based on previous incidents in other parts of the country, local law enforcement resources often focus on managing the incident itself or protecting other high-threat areas. Resources can be allocated to area hospitals later, but often only for those experiencing the highest patient surge.

Hospitals can work in advance with local police departments to develop an enhanced security plan for when law enforcement personnel are not available. This plan could address perimeter security and street closures initiated and maintained by hospital security personnel, and the facility's HICS procedures.

Establishment of Security Perimeters and Zones

Some hospitals have communicated security risks to staff in terms of zones. When concerns were raised about multiple shooters during the October 1, 2017 Las Vegas incident, staff were told that the grounds outside the hospitals were considered “hot” and safety was not guaranteed.³⁷ ED waiting areas and other places where friends and families gathered were considered “warm.” While staff needed to be on guard, private security guards often were present. ORs and patient rooms were considered “cold,” and people needed a valid reason to enter them. Some hospitals put surge security personnel in cold zones, but these staff often provided information and helped visitors as much as they provided security.

Access to Las Vegas hospitals was further restricted by designating three entrances: one for patients, one for family and friends of patients, and one for staff. Visitor entrances were staffed with people who could answer questions and provide support.

Law Enforcement Coordination

When law enforcement arrives to provide perimeter security, interview witnesses, or for other reasons, establishing clear coordination between the agency or agencies and the hospital is critical. The hospital should assign a liaison officer to work closely with a law enforcement liaison officer who will often be the highest-ranking individual from the local law enforcement agency. The hospital liaison’s job will be to coordinate with law enforcement personnel present from the various agencies. A meeting or conference room, preferably close to the ED, should be pre-designated for law enforcement’s use. More information about law enforcement coordination can be found in [APPENDIX I: HOSPITAL COORDINATION WITH LAW ENFORCEMENT](#).

DECONTAMINATION CONSIDERATIONS

Based on available information, the incident command staff will need to determine whether a decontamination or hazardous materials response is war-

ranted. If contamination of victims is suspected, the hospital should not rely on first responder gross decontamination. Rather, they should perform decontamination on anyone arriving from the scene.

All decontamination activity, whatever the severity of injuries, must happen before individuals enter the clinical areas, to protect the safety and health of staff and other patients.

The hospital should quickly activate decontamination-trained individuals who have up-to-date medical clearance. Some hospitals have established and maintained decontamination groups within the mass notification system to assist with decontamination efforts.

Decontamination-trained staff should drill regularly to maintain skills for donning and doffing personal protective equipment, and setting up and managing decontamination stations.

When special populations (children, the elderly, people with cognitive impairments or other health care needs) need decontamination, clinicians should slowly and clearly explain what needs to be done and why. Clinicians should also look for signs of impairment that could challenge communication. Special considerations for decontaminating children are discussed on [PAGE 34](#).

STAFF ACCESS AND EMERGENCY CREDENTIALING

In large-scale MCIs, additional clinicians may be needed. Hospitals in a health care system should have a mechanism to request staff from sister facilities. For example, when a driver intentionally hit several pedestrians in Lower Manhattan in 2017, surgeons from a hospital in upper Manhattan traveled to another system facility near the incident to assist. Hospitals may also have employment agreements in place that will give them access to additional clini-

cians who work part-time at the facility or have clinical privileges.

In the aftermath of catastrophic events, when an emergency declaration is in place, hospitals can also request clinicians through various local, state, and Federal programs, such as the New York City Medical Reserve Corps and ServNY, the Emergency System for Advance Registration of Volunteer Health Professionals, and the Emergency Medical Assistance Compact used by all 50 states and the US territories.

Hospitals should also be prepared for health care providers spontaneously arriving to help. Once the public learned of the mass shooting in Las Vegas, visiting clinicians went to local hospitals to do just that.³⁸ Depending on the scope, size, and duration of an MCI, volunteers may be needed to replace injured staff or relieve clinicians during future shifts.

Emergency response planning should include a discussion of whether the hospital would use unsolicited volunteer clinicians in the wake of an MCI, and how to manage credentialing. Emergency response plans that include volunteer assistance should have clear criteria for when to use volunteers. Hospitals should review their policies and protocols for granting disaster privileges to credentialed providers, and for integration and supervision of non-credentialed individuals.

If a hospital uses volunteers, a volunteer coordinator should be part of the HICS structure. The Iroquois Healthcare Association has developed a guide that details the various facets of a response involving volunteers. The guide includes templates, such as an Emergency Volunteer Privileges Application template and an orientation template that a facility can adapt.³⁹

CHAPTER 5: SUPPORTING FAMILY AND FRIENDS IN THE AFTERMATH

Providing support for concerned family and friends and assisting with reunification operations are among the most challenging aspects of MCI response. Recognizing that concerned family members may call or arrive at the hospital within minutes of an event, many hospitals already have family assistance or family support plans that can be quickly operationalized in response to a large MCI, and may include:

- Onsite support for family and friends who come to the hospital
- Establishing a phone bank to field calls from individuals trying to locate family members
- Providing information via the hospital website for family and friends seeking loved ones

These functions should be set up quickly, and staffed and serviced appropriately—including with access to interpretation services for people with limited English proficiency—and integrated with jurisdictional planning for family reunification and family assistance.

It is critical for a hospital to understand existing county or city plans for collecting information on missing loved ones, as well as for mobilizing a jurisdictional FAC or other operations to provide support and services to victims or loved ones of victims. Understanding these jurisdictional plans and coordinating with responsible agencies in advance reduces duplication of efforts, increases information sharing, and streamlines support for family and friends during a very difficult time. Coordination with the local jurisdiction's operations should be practiced in hospital exercises and drills as part of the broader MCI response.

Following are general considerations for hospitals. The hospital's experience with providing support and reunification assistance to family and friends will vary widely based on incident type, the incident's proximity to the

hospital, the hospital's proximity to other hospitals, and jurisdictional plans. A glossary of common terms will help hospital personnel understand the many aspects of reunification for living and deceased incident victims.

New York City facilities should note that a number of agencies—including DOHMH, the Office of Chief Medical Examiner (OCME), and NYCEM—have developed extensive plans to provide family support, victim identification, and reunification assistance after an MCI. PAGE 46 provides a brief overview of current plans, but note that advances are made continuously.

The "Second Surge"

A report about hospitals' response to the Las Vegas shooting described the arrival of family and friends as the "Second Surge" that hospitals addressed that night.⁴⁰ An average of four to six people for every patient sought to find loved ones at local hospitals.

CHALLENGES WITH THE SECOND SURGE

Friends and family will likely arrive with victims or shortly after, requiring that family reunification and support services be activated almost immediately. While hospital staff are accustomed to helping people in emotional distress when injured or when a loved one is injured or deceased, this distress will likely be amplified in the wake of a large-scale MCI.

Families and friends should be directed to a separate, pre-designated reception area away from patient care and media. Hospital emergency plans could delegate responsibility for setting up and managing a hospital-based operation for families to a particular department, with clear triggers for when it needs to open (for an incident with five or more casualties, for example) and what ac-

tions need to be taken within the first 15 minutes, first hour, and thereafter.

Establishing a Phone Bank

The hospital should have a plan in place to quickly set up a phone bank to manage the increased call volume likely to occur, especially after a large MCI. Communications and Public Affairs staff should manage any media-related calls, while a pre-designated group of individuals that may include social workers and patient care representatives should handle calls from loved ones.

Once a jurisdiction's FAC is opened, a caller seeking an individual who is not in the hospital (which is likely) and has not yet been reported missing should be warm-transferred to the jurisdictional phone line set up for this purpose. In New York City, this information is collected via 311. Staff working at the phone bank should also share information about jurisdiction-level operations such as FACs once they open.

Opening a Hospital-Based Family Support Center

Plans should include stocking a hospital-based center with food, water, toiletries, and phone chargers.

Baby wipes and spare clothing such as scrubs could be helpful for uninjured people arriving from the MCI scene. The center should be located near smaller rooms, where families can be updated privately on their loved one's condition.

Staffing

Hospitals often staff this area with social workers, chaplains, patient care representatives, and others who are accustomed to supporting and interacting with families. The Los Angeles County Emergency Services Agency (LACESMA) developed a guide for hospitals to create plans to help families after an MCI. The guide suggests a hospital-based family center could be staffed with the roles in the chart below.⁴¹

Job action sheets and just-in-time training materials should be prepared in advance. Those staffing the center should be briefed on the incident's nature and scale as known at the time, and given the training materials just before the center opens.

Family Support Center Procedures and Operation

Families and friends should log into the center and be given a special badge or identification sticker to

Role	Description
Family Reunification Unit Leader	Responsible for managing the center, including activating it, operating it, and eventually demobilizing it. In a large-scale MCI, a Deputy Family Reunification Unit Leader could be appointed to assist.
Registration and Tracking Specialist	Ensures family and friends sign in to the center's log and fill out patient tracking forms. They would also hand out identification stickers or badges, if used. Staff in this position would also coordinate the reunification process with patients who have been admitted to the facility. In larger-scale MCIs, LACESMA suggests assigning families to a staff member who acts as a "family host" to make sure that the family is updated and connected to services.
Family Services Specialist	Coordinates services such as mental health assistance or spiritual support for the family. If the MCI warrants it, LACESMA suggests also designating an Unaccompanied Minors Specialist at this level.
Call Center Specialist	Coordinates all call center activities related to the MCI, including instructing staff to warm transfer callers to jurisdictional resources, such as 311 to report loved ones missing and connect them to services.

denote them as family members. The families should also be asked to sign in and out every time they leave the center so hospital staff can keep track of them. The log should record the person signing into the center (first and last name, and contact number) and the name of the loved one they are seeking or waiting for. The log should also include a column where center staff can note whether a family member has been updated on a loved one's condition, reunited with a missing loved one, or provided any services.⁴²

Family members should also fill out forms about the person they are either seeking or awaiting news on. LACEMSA recommends that the form ask families to designate a primary family contact.

LACEMSA also suggests that families be given an information sheet upon registering. The sheet could:

- Describe the center's purpose
- List general guidelines (e.g., families must wear identification stickers in a visible location, sign in and out of the center, no press and media are allowed in the center)
- Explain that a patient's specific health information will not be shared with the media
- Review the services available through the center, such as pastoral or mental health care
- Ask families to refrain from posting specific information about their loved one's condition on social media, and ask them to notify center staff if they see misinformation, speculation, or rumors about the event or the hospital on social media

As the information on the sheet is general, the sheets could be pre-printed and included with the hospital-based operation's pre-stocked supplies.

Hospitals should establish a schedule for providing families with regular updates, and adhere to it, even when there is little or nothing new to report. A briefing schedule of every two to four hours is a best practice.

In jurisdictions with a centralized data collection mechanism for missing persons, family members should be encouraged to, and assisted with, calling the designated number to provide details about their loved one. This is extremely important for developing a jurisdiction-wide manifest and connecting people to broader family assistance services and structures. Besides basic demographic information, other information likely to be asked of family members is: the loved one's last known location and identifying features such as moles, markings, piercings, and tattoos.

Pediatric Safe Areas

Unaccompanied minors who are not injured or who were treated for minor injuries and separated from their guardians should be supervised in a secure, safe area away from patient care, media, the public, and even other families. Depending on the scale of the MCI, this could be a room with restricted access near the hospital-based family operation or its own center. Children may be here for several reasons, including:

- Their parent or guardian is seriously injured and getting care at the hospital
- The child was not with their parent or guardian when the MCI occurred (such as a school bus crash), and has been assessed or treated for minor injuries
- The child was separated from their parent or guardian during the MCI, and was either uninjured or treated for minor injuries
- The child's parent or guardian is deceased because of the MCI, and the child is awaiting reunification with another guardian or family member

The American Academy of Pediatrics (AAP) developed a toolkit to help hospitals facilitate pediatric reunification after an MCI. LACESMA recommends giving unaccompanied minors a special sticker to wear so staff knows their status. The Pediatric Safe Area should be child-friendly and free from choking hazards, poisons, and other dangers. It should be supplied with snacks, diapers, and formula, and staffed

with enough personnel to properly supervise the children.⁴³ Child Life staff are ideal for this role.



AAP's "Family Reunification Following Disasters: A Planning Tool for Health Care Facilities"

<https://www.aap.org/en-us/Documents/AAP-Reunification-Toolkit.pdf>



"Los Angeles County Family Information Center: Planning Guide for Healthcare Entities"

http://www.calhospitalprepare.org/sites/main/files/file-attachments/fic_planning_guide_final_062813_v62_0.pdf

Reuniting Unaccompanied Minors with Guardians or Family

Ensuring a child is reunited with their proper relative or guardian will likely be one of the most challenging aspects of a hospital's family support efforts. As the AAP notes, children who are separated from their families "are at risk for significant physical and mental trauma, neglect, abuse, and even exploitation."⁴⁴ While quickly reuniting families is important, hospitals should avoid releasing children to the wrong family or to a parent who may not have legal custody of the child.

Some jurisdictions have a Child Reunification Operations Team that includes a local school district representative and a law enforcement representative. These two groups bring their own internal child release policies to the operation and follow their standard operating procedures. Working with these agencies in advance to develop a policy will benefit this critical operation.

While most children will be able to self-identify their caregivers, some may not be able to due to injury or age. AAP suggests that hospitals develop reunification policies that require people to correctly answer questions that the child has already answered

separately, such as the child's teacher's name, pet's name, or favorite toy. Individuals can also be asked to provide photos of themselves with the child or the caregiver's registration with a child protective services agency.⁴⁵ NYCEM has developed reunification verification forms for children and adults, and a reunification completion checklist, which are available in **APPENDIX J: DEVELOPING FAMILY REUNIFICATION PLANS AND CENTERS**.

Pediatric Safe Areas should be adjacent or there should be a separate space for family members to privately be reunited with a child.

Interacting with Loved Ones of Patients Being Cared for at the Hospital

A separate space should be designated for private conversations between families and loved ones getting care at the hospital, or families whose loved ones appear to match the description of an unidentified patient in the hospital's care. For unidentified patients, efforts to confirm an individual's identity should be based on information provided before alerting the family to avoid errors at all costs. A group of senior-level staff should be designated to interact with these families and update them regularly on the condition of their loved ones.

Interacting with Loved Ones of Decedents at the Hospital

In the aftermath of a large MCI, hospitals could have a large number of decedents, both identified and unidentified. Extreme care must be taken in interacting with family members of these individuals. As with unidentified patients, efforts to confirm the identity of an unidentified decedent should be based on information provided before alerting the family to avoid errors. Plans must also consider any protocols imposed by law enforcement and the jurisdictional ME or coroner, both of whom may need to examine the body and collect evidence before family members

can see the decedent. A group of senior-level staff should be designated to inform families about their loved one and continue working with that family to make arrangements and connect them to broader jurisdictional support processes.

Loved Ones Seeking Individuals Not at the Hospital

When multiple hospitals are caring for people involved in an MCI, the family will likely arrive at a hospital that is not caring for their loved one. Once it is established that the person they seek is not there, assigned staff should help the family connect with the jurisdictional information line established to report missing persons. Staff should also determine when the jurisdiction-level FAC or similar operations will be activated and where it will be located. The family should be allowed to remain in the hospital-based family support center and receive any support such as food, mental health, or spiritual assistance until the FAC opens. The hospital should help transport the family to the FAC, if possible. If a loved one is found at a different hospital, the first hospital should also help transport the family to that location.

Intermediate Recovery Support for Patients and Families

Response plans should anticipate supporting families whose loved ones will need extensive hospital stays. Some hospitals may have existing housing for families for when loved ones are undergoing treatment, and such facilities may be useful, if available. Messaging about donations (see the [DONATION MANAGEMENT](#) section) could also be geared toward items that help these families, such as hotel, dining, and fuel gift cards.

[APPENDIX J](#) contains additional resources for developing family reunification plans and family support centers.

Using Technology to Facilitate Reunification

After the Pulse Nightclub shooting, Orlando Regional Medical Center staff designated an e-mail address to collect pictures and descriptions of missing loved

ones.⁴⁶ The hospital now has a web page that can be activated during an MCI. The page includes fields for a missing person's name, age, gender, description of tattoos, scars, and other identifying marks, and a space for their photograph to be uploaded. Also included are fields for the loved one or friend to enter their own name, select their relationship, and leave a phone number and e-mail address. It is critical that family reunification resources be developed in coordination with broader jurisdiction-level family reunification plans and protocols to not duplicate or contradict existing efforts.

As discussed in the next section, New York City has made extensive use of technology to facilitate patient identification, tracking, and victim assistance.

Terms & Definitions

The following terms describe resources provided after an MCI. Many organizations and jurisdictions use slightly different terms to describe the same types of services, which can lead to confusion or duplication of effort. These terms can help standardize how these services are described for the public and reduce confusion and misinformation.

FAC

A jurisdiction establishes a FAC to facilitate the exchange of timely and accurate information between family and friends of injured, missing, or deceased disaster victims, the investigative authorities, and the ME or coroner. The ME or coroner's role at the FAC includes gathering antemortem data (via the VIC) and notifying the next of kin about the deceased. Non-medicolegal services provided at the FAC could include grief counseling, childcare, religious support, facilitation of family needs, antemortem data collection, and notification of death to the next of kin. FACs can be physical or virtual sites.

Family Reception Center (FRC)

The FRC is a temporary location established minutes or hours after incident notification as a location where

friends and family members can gather to receive information until a FAC is established and operational. FRCs alleviate an unmanageable congregation of family members at the ME or coroner's office or the incident site and are intended to be open facilities for any individual who suspects a loved one may be involved in the incident. Reunification of victims and families may also occur at this location and continue at the FAC. When certain types of transportation incidents such as plane crashes occur, this operation is called a Friends and Relatives Center. Incidents such as plane crashes are codified in Federal legislation designed to support families in their aftermath.

Victim

A person who is harmed, injured, or killed because of a crime, accident, or other event or action.

Victim Identification Center (VIC)

A controlled area within the FAC where the acquisition of antemortem data occurs to enable the identification of victims of a mass fatality incident. Establishment of the VIC is the local medicolegal authority's responsibility.

Family Reunification and Assistance in New York City

New York City agencies have developed sophisticated plans and tools to provide support after an MCI, which they are constantly refining. Hospitals within New York City should be familiar with these tools and protocols to reduce duplication of effort in the chaotic aftermath of an MCI. The following section describes the agencies and supports involved in family reunification and assistance.

NYCEM

NYCEM is responsible for coordinating citywide emergency planning and response for all types and scales of emergencies. During an MCI, NYCEM establishes the New York City FAC and manages it with City, State, and Federal agencies, and not-for-profit organizations.

OCME

The OCME conducts independent investigations using forensic science in the service of families, communities, and the criminal justice system. During an MCI, the OCME has jurisdiction over all related fatalities and carries out disaster response functions as required by the Citywide Incident Management System (CIMS). As the lead agency for fatality management in the event of a disaster, OCME also staffs and operates the Victim Identification Center (VIC) housed inside the FAC, which collects information from family and friends on missing and/or deceased victims to aid identification efforts.

New York City Police Department (NYPD)

During an MCI, one of the NYPD's many responsibilities is to conduct searches for people reported missing. Such searches likely will involve NYPD detectives visiting area hospitals known to be caring for incident-related patients. Depending upon the nature of the incident, NYPD would coordinate these efforts with the appropriate Federal agencies, such as the Federal Bureau of Investigation (FBI) or the Department of Homeland Security.

CIMS

CIMS establishes and reviews roles and responsibilities and designates authority for City, State, and other government entities and not-for-profit and private sector organizations that perform and support emergency response. CIMS was developed to address New York City's unique incident management requirements. In the event of an MCI, the City will follow the protocols outlined in CIMS.

Unified Victim Identification System (UVIS)

OCME developed the UVIS following the September 11, 2001, attacks and the November 12, 2001, crash of American Airlines Flight 587. UVIS manages and coordinates all activities related to victim identification. The system works with the City's 311 system to build a manifest of possible victims and coordinates responses among City leaders, MEs, police, FAC staff, hospitals, and other agencies or stakeholders. UVIS helps maintain open communications with the families, friends, and associates of possible victims via a centralized casualty call center. The system allows data to be collected in one unified database and a centralized single point of intake is established for tracking individuals who could be involved in an MCI. UVIS can be activated for any incident with the potential for 10 or more fatalities.

When UVIS is activated, public messaging via television, radio, and social media directs individuals seeking loved ones to call 311 to provide operators with basic information about the missing person. This information includes last-known location, name, age, gender, and any identifying characteristics such as scars or tattoos. As persons are reported and recorded in UVIS, it leverages connections to Regional Health Information Organizations to search participating hospitals' Admission/Discharge/Transfer (ADT) data to determine if a patient who potentially matches the missing person's description has been or is being treated at an area hospital.⁴⁷ If a potential match is found, NYPD Missing Persons detectives assigned to the incident can then follow up with the individual who reported the person missing to determine if a reunification can be made. The objective of this service is to facilitate family reunification while decreasing the number of calls or visits directly to hospitals. Because UVIS draws upon hospital ADT data, it is essential that hospitals register incident-related patients as quickly as possible. Please see [CHAPTER 3: CLINICAL MANAGEMENT](#) for additional information about disaster registration.

CHAPTER 6:

MANAGING THE COMMUNITY RESPONSE TO AN MCI

Since hospitals are anchors within their communities, they are likely accustomed to media and governmental agency inquiries. During an MCI, especially a large-scale event, family and friends of the injured, law enforcement, and media may overwhelm a facility. This chapter discusses working with the media, community donations, and assisting with investigations.

MEDIA MANAGEMENT

If a hospital is likely to receive a large number of patients from an MCI, media management activities should be immediately triggered. For a large event that receives a significant amount of media attention, media management can be a very challenging aspect of the response. Planning is therefore critical. Immediate security and lockdown procedures taken should include establishing an area for media personnel that is some distance from the ED, and security personnel should be assigned to it. Additionally, security procedures should be established and enforced so that members of the media cannot enter the hospital.

No matter the size of the incident, if a media presence is detected, a hospital PIO should be designated. The PIO should work with incident command staff to provide the media with regular updates, even if to tell them that no new information is available. This allows the hospital to inform the narrative, rather than react to it. To the extent possible, key messages should be aligned with those of other hospitals receiving victims and jurisdictional officials. An area for press conferences should be pre-designated where media can enter without interrupting hospital operations.

Under no circumstances should staff other than the designated PIO interface with the media; this should be communicated to staff frequently and enforced. The Pub-

lic Affairs Department should monitor social media for a number of reasons:

- To quickly dispel rumors
- To learn about and quickly address any postings by hospital staff
- To work to control media outreach to patients, and family and friends within the hospital

More information is available in [CHAPTER 1: MONITORING, NOTIFICATION & ACTIVATION PROTOCOLS](#) and [APPENDIX C: SOCIAL MEDIA MONITORING](#).

Media members also may contact patients or their family via social media to arrange interviews. The hospital should develop a policy for this that should address where on hospital grounds these interviews can take place. For in-person interviews, the policy should address whether a member of the Public Affairs staff should be present.

INJURED MEMBERS OF SERVICE AND THE PRESENCE OF PUBLIC OFFICIALS AND OTHER DIGNITARIES

First responders are sometimes injured while in the vicinity of or responding to an MCI. Ideally, any special protocols involving first responders will be developed in advance with local first responder agencies. For example, the NYPD asks that a separate room or area be available where the responder's family and colleagues can wait for information. Hospitals in any jurisdiction can expect the arrival of the injured responder's colleagues and public officials such as a mayor or city council members. If the hospital is treating a first responder injured during the MCI, clinicians should immediately alert the hospital's PIO.

Response plans also should consider the effect that the presence of public officials or other dignitaries could have in the days following a large-scale MCI. For example, vis-

its from dignitaries not only require extra security, but the presence of advance teams beforehand, which could impact hospital operations.

Information about interfacing with the NYPD and other law enforcement can be found in [APPENDIX I: HOSPITAL COORDINATION WITH LAW ENFORCEMENT](#).

DONATION MANAGEMENT

Community members often wish to donate to hospitals that treat the injured during an MCI. For example, 2,500 pizzas were delivered to University Medical Center in Las Vegas the night of the shooting.⁴⁸ While generous, donations can be an additional challenge for facilities to deal with amid an MCI response. Response plans should anticipate such donations and offer protocols to address them. For some facilities, managing donations became a full-time job after an MCI occurred.

Understanding this facet of a community response in advance better prepares hospitals to address it. Designating a non-clinical department such as the hospital's foundation or development staff is one way to manage these donations. Hospitals could also redirect donations to the organization in a hospital's regional emergency management plan that manages volunteers and donations. Hospitals also can tell the community via social media and traditional media which items they need, making donations as helpful as possible. Cellphone chargers, socks, and toiletries such as deodorant and razors are among the items that patients, staff, and families find useful, ASPR advises.

With food donations, response plans should consider safe handling practices while addressing how to get donations to hospital staff during and in the immediate aftermath of an MCI. One possibility is to plan to rotate donations through different departments. A plan should also address whether the hospital will accept items donated to patients and how it will manage them. According to ASPR, one hospital created

a "store" for donated items that was staffed by volunteers.

The plan also should address monetary contributions. Such contributions could come from individuals, companies, or organizations, and could be for survivors or staff. Hospitals should also know how accepting such donations could impact their not-for-profit status.

Financial Considerations

During a large-scale MCI, hospitals might need to spend significant financial resources in areas other than patient care. Las Vegas hospitals reported spending thousands of dollars on portable toilets, barriers, extra security, and bottled water to address the surge of patients, visitors, and media.⁴⁹

CHAPTER 7:

LEGAL AND REGULATORY CONSIDERATIONS

State and Federal laws and regulations, such as EMTALA, are still applicable during emergency events, including catastrophic MCIs. While hospitals can apply to CMS to waive certain regulations retroactively to the time of the emergency, a number of requirements must be met. These include the need for a Presidential declaration of a disaster as well as a disaster declaration and exercise of waiver authority from the Secretary of Health and Human Services. If these waivers, known as 1135 waivers, are issued for an affected hospital, the facility should carefully review them to determine what is covered. States can similarly waive certain regulations during emergencies.

CMS allows hospitals to use a number of strategies to increase inpatient capacity without the need for 1135 waivers. Inpatient surge activities include early discharge planning, opening already certified beds or units, and using remote locations. Any temporary facilities must meet all of CMS's Conditions of Participation and must comply with all state and county licensure and Life Safety Code requirements.⁵⁰

EMTALA DURING EMERGENCIES

EMTALA is Federal legislation that requires all hospitals with an ED and that participate in the Medicare program to examine anyone who presents to an ED and requests medical treatment to determine the presence of an emergency medical condition (EMC). That examination is called a medical screening exam (MSE) and is a defined process under EMTALA. It also prohibits hospitals from transferring patients to another hospital unless the patient is appropriately stabilized, and certain other conditions are met. The law was initially passed to prohibit hospitals from delaying or withholding treatment based on a patient's ability to pay, but its protections extend to all patients who present to the ED.

These requirements may cause concern that sending patients to another hospital during an MCI could violate EMTALA. Efforts should be made through local planning to establish diversion criteria and protocols to limit the number of individuals presenting to a particular ED. However, once a patient presents to an ED, the hospital must provide the individual with an MSE, either in the ED or in an alternate location pursuant to the facility's emergency plan; necessary stabilizing treatment; and an appropriate transfer. ASPR recommends approaches to coordinating triage and the redistribution of patients in coordination with EMS and other local hospitals to expedite the process during emergencies.⁵¹ Hospitals should maintain information to track any transferred patients. Hospitals should also anticipate that not all circumstances will be covered by local and state plans and should develop emergency plans that anticipate the inability to deliver "definitive" care.

When a waiver with respect to EMTALA has been issued due to an emergency, CMS will not impose sanctions on a hospital with a dedicated ED located in an emergency area for relocation or redirection of individuals to an alternate location to receive an MSE pursuant to a state plan or for inappropriate transfers necessitated by the circumstances of the emergency. However, at no time may a hospital take any action that discriminates on the basis of payment or ability to pay, and the hospital must strive to comply with EMTALA principles. For an EMTALA waiver to apply to a specific hospital, the hospital must activate its disaster protocol and the state must activate an emergency preparedness plan, if only in the area where the hospital is located.

LAW ENFORCEMENT INVESTIGATIONS

Depending upon the nature of the incident, various city, state, and Federal agencies may be involved in investi-

gative activity, including interviewing victims and collecting evidence. While representatives of these agencies know patient care is the priority, they often are under time pressure to collect information. The below table provides guidance on potential agency involvement for certain types of incidents.

To coordinate the activities of law enforcement agencies, the hospital should follow the principles outlined in [CHAPTER 4: SAFETY AND SECURITY](#), and in [APPENDIX I](#). The hospital liaison assigned to work with law enforcement should collaborate closely with the hospital Legal Department to meet requests for evidence, staff interviews, or other issues that arise. During emergency situations, regulatory allowances could be made to share patient information with certain entities, including law enforcement. This is discussed in the next section and in [APPENDIX K: PRIVACY LAW AND THE SHARING OF MEDICAL INFORMATION DURING EMERGENCIES](#).

PRIVACY LAW AND MEDICAL INFORMATION SHARING

During emergencies, questions often arise about sharing patient information and HIPAA requirements. HIPAA still applies in disaster or MCI scenarios, and hospitals generally should seek oral permission to share a patient's protected health information (PHI) whenever possible. Certain information can be shared with government agencies during an MCI, especially when the goal is to identify a patient or facilitate family reunification. [APPENDIX K](#) discusses in greater detail what types of information can be disclosed and to whom. GNYHA also has created *Revisiting HIPAA*, a guide to help hospitals follow privacy regulations.



GNYHA website: Features many emergency preparedness resources, including *Revisiting HIPAA* and hazard-specific information.

<https://www.gnyha.org>

MCI Condition(s)	Possible Law Enforcement Involvement
Fire	<ul style="list-style-type: none"> Local fire department and fire marshals
Transportation accident	<ul style="list-style-type: none"> National Transportation Safety Board State and local transportation authorities State and local police
Terrorism	<ul style="list-style-type: none"> FBI State and local police
Involvement of foreign dignitary	<ul style="list-style-type: none"> US Department of State Diplomatic Security Service US Secret Service Protective services from dignitary's country
Involvement of US President, Vice President, or their family members	<ul style="list-style-type: none"> US Secret Service
Involvement of law enforcement personnel, arrestees, prisoners, inmates, and/or defendants	<ul style="list-style-type: none"> US Marshals Service State court system State and local police departments Local sheriff's office Local corrections department

Coordinating with Foreign Consulates and Embassies

In the New York City region, there is a high probability that some victims of an MCI will be foreign nationals. If citizens of another country are cared for in the hospital, the closest consulate or embassy will likely request information about them.

In the aftermath of the 2017 Halloween vehicle ramming incident in New York City, four embassies made inquiries of the receiving hospital about patients who could be citizens of their countries. Of those inquiries, two were by phone and two were in person. Hospital staff referred each inquiry to the PIO to first confirm the diplomatic credentials of those inquiring. Because HIPAA applies to anyone treated in the medical setting—regardless of their country of residence—hospital staff then asked patients' permission before releasing any information to the embassies. While in this case all patients were able to express their wishes, when a patient is unable to provide permission, hospital personnel may make the disclosure anyway, if in their professional judgment disclosing the information is in the patient's best interests. However, upon request for information about a patient by name, a hospital may release limited PHI contained in a facility directory (e.g., patient location in the facility) and the patient's general condition, provided the patient has not opted out.

CHAPTER 8: RECOVERY

MCI take a toll on everyone involved—the injured, first responders, those treating the injured, and even uninjured bystanders. Helping those involved recover from an MCI starts during the event itself. This chapter discusses mental health recovery, moving past an MCI as a facility, and steps for assessing and evaluating an MCI response.

CARING FOR STAFF AND PSYCHOLOGICAL FIRST AID

Hospital staff involved in the response to a large MCI may be profoundly impacted. Hospitals should develop multi-faceted staff recovery assistance plans to ensure they have support in the hours, days, weeks, and months after an incident. Hospitals can leverage existing resources including Employee Assistance Programs, in-house psychiatry and social work services and expertise, and existing programs and initiatives that address issues related to second victims. A hospital should also explore broader jurisdictional or regional resources that could augment internal offerings. After the mass shooting in Las Vegas, the Veterans Administration sent a dedicated bus with trained counselors to meet with staff of the impacted hospitals.⁵²

Staff support plans should integrate a combination of strategies, including immediate use of PFA during the MCI response, unit-level debriefs after the response, individual support and counseling, and communications from hospital leadership about available resources. It is paramount that messaging about services encourages (or perhaps even requires) all staff involved in the response to partake in these activities to create a supportive environment that de-stigmatizes seeking help. Staff who had a loved one directly impacted may need extra assistance, and response plans should consider directing behavioral health staff to reach out directly to these people.

Facilities involved in recent large-scale MCIs have reported that staff not called in for the response were also affected, with some reporting that they felt angry and left out.⁵³ This could be addressed in advance by adding messaging to in-house response training that emphasizes the importance of staff who serve in the aftermath of an incident by ensuring the hospital's ongoing functionality and providing continuing care for patients admitted during the event.

Preparedness can reduce stress in the aftermath of an MCI or other catastrophic event, according to the Substance Abuse and Mental Health Services Administration (SAMHSA). Participating in drills and simulations that expose people to disaster stressors can strengthen response skills. Additionally, understanding the ICS can help responders work more effectively with others to reduce stress during the incident.⁵⁴

Another way to support staff in the aftermath of an MCI is to encourage them to watch out for each other by looking for signs of stress or burnout and reminding each other to eat and get rest. The Center for the Study of Traumatic Stress notes that, "Self-care, self-monitoring, and peer monitoring are as important as caring for patients."⁵⁵

PFA Should Begin During MCI Response

PFA's goal is to intervene in the immediate aftermath of a traumatic event to help "reduce the initial distress caused by traumatic events and foster short- and long-term adaptive functioning and coping,"⁵⁶ according to a guide developed by the National Child Traumatic Stress Network and the Veterans Affairs' National Center for PTSD. Psychiatrists, social workers, and other mental health experts can provide PFA, but health care workers can also be trained to provide it to survivors. Several organizations have developed guides and tip sheets to help providers

and hospital staff mentally and emotionally prepare for and recover from a disaster. Hospitals may want to consider adding a PFA component to their EOPs.

Acknowledging Milestones and Anniversaries

Another way to assist with staff recovery is to gather people together for ceremonies. Early on, such gatherings should be to mourn those lost in the event, but future events can focus on progress. “Even if progress is slow after a large-scale event, celebrating small milestones can help keep staff members focused on recovery rather than dwelling on what was lost,” according to a guide created by the Institute for Disaster Mental Health at SUNY New Paltz.⁵⁷

MOVING TO THE INTERMEDIATE PHASE

Once the initial treatment phase has passed, a facility could address several tasks to help it move toward normal operations. According to a study of the response to the Las Vegas shooting, hospitals reported that a number of tasks needed to be completed almost simultaneously:⁵⁸

- Ensuring that patients were properly registered in the EMR, and that any handwritten notes were entered into their records
- Correctly tracking the people who were called in, showed up, or stayed past the end of their shift to assist with the response, including logging the number of hours each staff person or volunteer worked
- Cleaning the entire hospital, not just the ED and patient rooms



SAMHSA “Tips for Disaster Responders: Preventing and Managing Stress” guide: Includes information and resources for all involved in MCI response.

<https://store.samhsa.gov/system/files/sma14-4873.pdf>



Centers for Disease Control and Prevention web page: Provides tips and resources for disaster responders, including signs of burnout and secondary traumatic stress.

<https://emergency.cdc.gov/coping/responders.asp>



CSTS list: Recommendations for hospital leadership to support providers in the aftermath of a traumatic event.

https://www.cstsonline.org/assets/media/documents/archive/CSTS_stress_management_healthcare_providers.pdf



CSTS factsheets: Address facets of trauma, such as a compilation of tests to assess how responders are coping in the aftermath of an MCI, and provide tips for hospital leadership to manage their own stress during and after a disaster.

<https://www.cstsonline.org/fact-sheet-menu/fact-sheet-list>



The Institute for Disaster Mental Health at SUNY New Paltz’s “Disaster Mental Health Assistance in Public Health Emergencies: Evidence-Informed Practices for Public Health Workers”: Includes a series of tipsheets for managers helping staff recover after an MCI or other catastrophe. Tipsheets discuss typical physical, behavioral, cognitive, emotional, and spiritual responses to MCIs, and helpful types of psychoeducation for survivors and providers in the immediate aftermath of a catastrophe.

https://www.albany.edu/sph/assets/IDMH_Toolkit.pdf



World Health Organization “Psychological First Aid: A Guide for Field Workers”

http://apps.who.int/iris/bitstream/handle/10665/44615/9789241548205_eng.pdf;jsessionid=81ADB206EDA6A1A35A61A48EC151BEC5?sequence=1

- Rescheduling all cancelled surgeries, which was a challenging task because surgery schedules were already full
- Transferring patients, because many of the injured did not reside in the Las Vegas area and wanted to return home for rehabilitation. This could be an issue for hospitals in the metropolitan New York area, with its many visitors and daily commuters.
- Managing donations received

In the longer term, hospitals were asked to provide documentation for people treated as part of the MCI to prove they were eligible for funds raised to assist shooting victims.

AFTER-ACTION CONFERENCES AND DEVELOPING IMPROVEMENT PLANS

An important aspect of recovering from an event is the After-Action Conference or series of conferences. This is an opportunity for anyone involved in the response to reflect on the experience from an operational perspective to improve future responses. After-Action Conferences are no-fault environments where participants can review the response timeline, aspects of the hospital emergency plan relevant to the response (what was supposed to happen), and engage in a frank discussion of what went well and what needs improvement.

For a large response involving many hospital staff, offering several conference times and synthesizing the collected information is important. Involving ALL staff in the After-Action Conference process—including clinicians, security, environmental services, transporters, registration, administration, and social work—is also critical. This will give the hospital a full understanding of how to improve future planning.

After-Action Report and Improvement Plan

Once the After-Action Conferences have ended, the results should be compiled and synthesized into an

After-Action Report (AAR). Improvement plan items—which outline specific tasks such as revising an existing protocol, creating a new protocol to address an identified gap, or exercising a specific aspect of the response plan—should also be identified. The hospital's Emergency Management Committee should be heavily involved in reviewing and finalizing the After-Action Report and Improvement Plan.



CMS After-Action Report template: These instructions and After-Action Report template were created for use after exercises or after an emergency such as an MCI.

<http://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertEmergPrep/Downloads/aartemplateinstructions.zip>

Jurisdictional After-Action Process

For large MCIs, hospital representatives could also be asked to participate in a jurisdictional After-Action process on how to improve the jurisdiction's plans and processes. This is an excellent forum to address challenges and successes related to coordination with external agencies.

FROM PLANNING TO ACTION: PREPARING STAFF FOR AN MCI RESPONSE

CHAPTER 9:

PREPARING HOSPITAL STAFF FOR MCI RESPONSE

Developing detailed plans to respond to MCIs and other emergencies is essential, but these plans will not help if no one knows about them. Training hospital staff—not just clinicians, but members of other departments, such as admitting and environmental services—to use facility plans and procedures is crucial. This chapter discusses different types of training and exercises, and how to build on them to prepare staff for MCIs.

HOSPITAL TRAINING AND EXERCISE REQUIREMENTS

CMS requirements, TJC standards, and state regulatory requirements form the foundation for hospital emergency preparedness programs. CMS requirements and TJC standards include staff training and exercises that test EOPs and procedures. Given the required focus on likely hazards, trainings and exercises related to patient surge from MCIs are highly relevant to both frontline staff and facility leadership.

Training

CMS requires that all staff receive general emergency preparedness training, including familiarity with facility-specific plans and procedures. Additionally, staff with specific roles within HICS and/or HIMT should be trained on HICS and the NIMS.

Staff who have a potential role during an MCI response should receive training specific to their role. Training should include a review of the facility's EOP and any annexes or appendices related to patient surge or mass casualty response. The training should also cover any facility protocols and procedures that those in specific roles will need to carry out such as:

- Plan activation procedures
- The facility's mass notification system and other communication protocols
- Location and use of specialized equipment such as disaster carts and disaster registration packets
- Activation and set-up of alternate treatment areas
- Roles of support services departments
- Activation and set-up of complementary operations including family support center, Pediatric Safe Area, phone bank, and media management



Center for HICS Education and Training website: Includes resources and forms for use by health care providers.

<http://hicscenter.org/SitePages/HomeNew.aspx>



California Emergency Medical Services Authority website: Provides nearly two dozen HICS 2014 forms that can be downloaded as PDFs or Word documents.

<https://ems.ca.gov/hospital-incident-command-system-forms-2014/>



California's Emergency Medical Services Authority reviews: Reviews components and functions of the HICS.

<https://ems.ca.gov/disaster-medical-services-division-hospital-incident-command-system-resources/>

Exercises

Exercises test elements of a facility's plans and protocols, and help staff understand their role during a response and identify gaps in plans. Exercises can run the gamut from 10-minute, unit-based familiarization drills to full-scale exercises with mock patients.

Homeland Security Exercise and Evaluation Program (HSEEP) Guidance

Most hospitals use HSEEP Guidance and Policy to develop their exercise programs. Developed and maintained by the Federal Emergency Management Agency (FEMA), the HSEEP Exercise Cycle includes exercise design and development, conduct, evaluation, and improvement planning. This cycle enables hospitals to test and continuously improve their plans, thereby enhancing facility readiness.

HSEEP Exercise Types

FEMA breaks exercises into two classes: discussion-based and operations-based. Discussion-based exercises involve talking through response protocols and include seminars, workshops, and tabletop exercises. Operations-based exercises require a more active approach, such as personnel walking through protocols that simulate an actual response. These types of exercises include drills, functional exercises, and full-scale exercises. The table below describes them in greater detail.⁵⁹

FEMA experts suggest starting with simpler exercises such as seminars and working up to drills and other

more complex exercises, a system called the Building Block Approach. It is critical that all exercises have stated, capability-based objectives.

USING EXERCISES TO PREPARE FOR MCI RESPONSE

Given the complexity of an MCI response, facilities will likely use a combination of exercises to prepare individuals in specific units and to test coordination among various departments during a high-stress situation.

Unit-Based Drills

Conducting brief drills at the unit or departmental level can be a critical part of MCI response planning. At the unit level, exercises can be brief and basic. Discussion-based exercises can orient staff members within the unit or department for the MCI response protocols for which they are responsible. Later, brief 10–20 minute drills can offer important opportunities for staff to practice procedures that may differ from their daily activities. Example drills include:

- Conducting a brief tabletop exercise with ED staff to simulate receiving an MCI notification and clearing space in the ED for expected patients

Discussion-Based Exercises	Operations-Based Exercises
Seminars generally introduce participants to, or review strategies, plans, policies, procedures, protocols, resources, concepts, and ideas.	Drills are coordinated, supervised activities that validate a specific function or capability. Drills are commonly used to provide training on new equipment, validate procedures, or to practice and maintain current skills.
Workshops are more interactive than seminars and focus on building a product, such as a new standard operating procedure, checklist, EOP, continuity of operations plans, or mutual aid agreement. To be effective, workshops should have clearly defined objectives and a specific issue focus.	Functional Exercises validate and evaluate capabilities, multiple functions, and/or sub-functions. They typically focus on exercising plans, policies, or procedures and are conducted in a realistic, real-time environment. Movement of personnel and equipment is usually simulated.
Tabletop Exercises generate discussion on various issues about a hypothetical simulated emergency. Tabletops can enhance general awareness, validate plans and procedures, or rehearse concepts.	Full-Scale Exercises are typically the most complex and resource-intensive type of exercise. They often involve external stakeholders and validate many facets of preparedness.

- Having registration staff locate disaster registration packets and begin using disaster registration protocols
- Simulating a call to ask the OR Scheduling Desk to hold new cases and begin clearing the ORs for emergency use
- Simulating a call to the blood bank to activate MCI procedures

Drills should be conducted more than once during different shifts to ensure all personnel are trained.

Gaining Buy-In for Exercises

Garnering the participation of clinical and administrative leaders can be challenging, but is essential. Using real-world incidents from other parts of the country or the world—essentially asking “what if this happened here?”—is one way to gain the attention of facility leaders. Demonstrating how exercises can fulfill existing regulatory and accreditation requirements is another promising strategy.

HOSPITAL- AND NETWORK-LEVEL EXERCISES

Hospital-Level Exercises

Hospital-level exercises test the training and preparedness of individual departments within the hospital, as well as interdepartmental coordination. The experience gained in mini, department-level drills will be important as individual departments carry out specific responsibilities that will be incorporated into an integrated response.

System/Community Exercises

Health system or community-level exercises help to test intra-facility or external protocols and often involve patient transfer or transport, resource requests or allocations, and coordination with first responders. Large health systems often plan such exercises to test information and resource-sharing capabilities and protocols for patient care. Exercises led by public health or emergency management agencies are im-

portant opportunities for health care systems to practice coordination with these essential stakeholders.

Exercise Evaluation

When planning any type of discussion- or operations-based exercise, planning for the evaluation is important. A successful evaluation depends on understanding the exercise’s objectives, agreeing on which data points to use for evaluation, creating a mechanism to record those data points, and using that information to compile an AAR.

Sample objectives for an exercise include:

- Assess current MCI and mass decontamination procedures
- Assess notification procedures and capabilities
- Assess the ability of specific departments to respond and coordinate together

For discussion-based exercises, evaluation can be as simple as a participant survey at the conclusion of a workshop, or someone sharing detailed notes at the end of a tabletop discussion.

Operations-based exercises require substantial pre-planning to carry out exercise evaluation. Inter-departmental drills, for example, require more than one person so each department’s response can be observed. Community-wide drills will require at least one observer for each participating organization. The observers should be selected well in advance of the exercise and have expertise in the area they will observe. They should receive advance training on the exercise’s objectives and know what to look for during it. In these larger exercises, evaluators should record actions taken, response times, and observations on a common form. This will show whether protocols were followed, and lead to the creation of an AAR for the exercise.

Improvement Planning

An important goal of these exercises is to identify gaps in plans, procedures, or training. Discussion-based ex-

ercises can help to quickly identify and correct gaps within a department. The improvement planning process can be more complex when an inter-departmental or multi-organization exercise is involved. When an AAR created after a larger exercise identifies a gap, the departmental- and organizational-level administration should review it and confirm that the gap exists. Another agency or elected official may also need to confirm this, depending on the specific gap (for example, a communication issue identified between a first responder agency and the hospital).

- What training is needed to improve performance?
- What are the lessons learned for handling similar problems in the future?

Engaging hospital staff with training and exercises enables emergency managers to continuously test and improve response plans, while simultaneously underscoring the importance and urgency of emergency preparedness for employees across the organization.



FEMA Homeland Security Exercise Evaluation Guide: Provides principles and framework for developing and conducting exercises.
https://www.fema.gov/media-library-data/20130726-1914-25045-8890/hseep_apr13_.pdf



FEMA HSEEP program: Contains numerous resources to help hospitals at various stages of developing and conducting exercises, such as briefings for actors participating in larger-scale exercises and a template for publicly announcing exercises.
<https://preptoolkit.fema.gov/web/hseep-resources>



ASPR Excel-Based Patient Arrival Generator: Available via free download for hospitals. Clinicians can use the randomly generated patient profiles to practice triaging during an MCI.
<https://www.phe.gov/preparedness/planning/hpp/surge/pages/default.aspx>

Next, a corrective plan should be developed. FEMA's HSEEP guide recommends steering development with the following questions:⁶⁰

- What changes to plans and procedures are needed to improve performance?
- What changes to organizational structures are needed to improve performance?
- What changes to management processes are needed to improve performance?
- What changes to equipment or resources are needed to improve performance?

END NOTES

1. Federal Emergency Management Agency, "NIMS and the Incident Command System," (November 23, 2004). https://www.fema.gov/txt/nims/nims_ics_position_paper.txt (accessed July 16, 2018).
2. California Emergency Medical Services Authority, "Hospital Incident Command System," <https://ems.ca.gov/disaster-medical-services-division-hospital-incident-command-system-resources/> (accessed October 6, 2018).
3. J. Asensio and Trunkey, D., "Current Therapy of Trauma and Surgical Critical Care E-Book," *Elsevier Health Sciences* (April 20, 2015); p. 17.e9.
4. Florida Department of Health, "Hospital Medical Surge Planning for Mass Casualty Incidents," <https://www.urmc.rochester.edu/medialibraries/urmcmedia/flrtc/documents/wny-hospital-medical-surge-planning-for-mass-casualty-incidents.pdf> (accessed January 30, 2019).
5. Nevada Hospital Association, "A Day Like No Other." In press.
6. See note 5.
7. Los Angeles County Emergency Medical Services Agency, "15 'Til 50 Mass Casualty Incident Guide For Healthcare Entities," (January 2016). <http://cdphready.org/wp-content/uploads/2016/01/15-til-50-MCI-Guide.pdf> (accessed July 24, 2018).
8. Assistant Secretary for Preparedness and Response (ASPR), "Trauma Hospitals and Mass Shootings," *The Exchange* (2018); 1(7): 13.
9. ASPR TRACIE, "No-Notice Incidents: Hospital Triage, Intake, and Throughput" (April 2018). <https://aspr-tracie.s3.amazonaws.com/documents/no-notice-incidents-triage-intake-throughput.pdf> (accessed July 27, 2018).
10. See note 5.
11. ASPR TRACIE, "No-Notice Incidents: Trauma System Considerations" (April 2018). <https://asprtracie.s3.amazonaws.com/documents/no-notice-incidents-trauma-system-considerations.pdf> (accessed July 23, 2018).
12. ASPR TRACIE, "No-Notice Incidents: Trauma Surgery Adaptations and Lessons" (April 2018). <https://asprtracie.s3.amazonaws.com/documents/no-notice-incidents-trauma-surgery-adaptations-and-lessons.pdf> (accessed July 13, 2018).
13. See note 5.
14. See note 5.
15. See note 5.
16. See note 11.
17. See note 7.
18. See note 5.
19. See note 12.
20. See note 11.
21. J.A. Ibrahim and Cheatham, M.L., "Pulse Nightclub: Deadliest Mass Shooting in U.S. History," *Orlando Health. May 2016 presentation at the Joint Commission Emergency Preparedness conference.*
22. See note 5.
23. G. Neyman and Irvin, C.B., "A single ventilator for multiple simulated patients to meet disaster surge," *Academic Emergency Medicine*, (November 2006); 13(11): 1246–9.

24. K. Menes, Tintinalli, J., Plaster, L., "How One Las Vegas ED Saved Hundreds of Lives After the Worst Mass Shooting in U.S. History," *Emergency Physicians Monthly*, (November 3, 2017). <http://epmonthly.com/article/not-heroes-wear-capoes-one-las-vegas-ed-saved-hundreds-lives-worst-mass-shooting-u-s-history/> (accessed October 31, 2018).
25. Centers for Medicare & Medicaid Services, "State Operations Manual Appendix V—Interpretive Guidelines—Responsibilities of Medicare Participating Hospitals in Emergency Cases, Revision 60," (July 16, 2010). https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Downloads/som107ap_v_emerg.pdf (accessed January 30, 2019).
26. See note 5.
27. See note 7.
28. ASPR TRACIE, "No-Notice Incidents: Fatality Management," (April 2018). <https://asprtracie.s3.amazonaws.com/documents/no-notice-incident-fatality-management.pdf> (accessed July 30, 2018).
29. T. Grubbs, "Preserving Crime Scene Evidence when Treating Patients at an MCI," *Journal of Emergency Medical Services* (May 5, 2014). <https://www.jems.com/articles/print/volume-39/issue-5/features/preserving-crime-scene-evidence-when-tre.html?c=1> (accessed August 6, 2018).
30. US Census Bureau, "Quick Facts, United States," <https://www.census.gov/quickfacts/fact/table/US/AGE295217#viewtop> (accessed October 25, 2018).
31. New York City Pediatric Disaster Coalition and New York City Department of Health and Mental Hygiene, "Pediatric (Non-PICU) Hospital Surge Plan Guidelines." In press.
32. See note 31.
33. Pediatric Disaster Coalition, "PDC Pediatric Issues for Bomb Blast Terror Scenarios," November 25, 2015 presentation to GNYHA Roundtable on Preparedness. <https://www.gnyha.org/tool/pediatric-mass-casualty-event-presentation/> (Accessed July 13, 2018).
34. B. J. Braun, Holstein J., Fritz T., Veith N.T., Herath S., Mörsdorf P., Pohlemann, T., "Polytrauma in the Elderly: A Review," *EFORT Open Review* (May 31, 2016); 1: 146-151. <https://online.boneandjoint.org.uk/doi/full/10.1302/2058-5241.1.160002> (accessed September 27, 2018).
35. American College of Surgeons Committee on Trauma, "Trauma Quality Improvement Program: Geriatric Trauma Management Guidelines <https://www.facs.org/~media/files/quality%20programs/trauma/tqip/geriatric%20guide%20tqip.ashx> (accessed September 27, 2018).
36. L. Stelter, "Improving response to emergencies involving autistic children," (April 2, 2018). <https://www.ems1.com/autism/articles/379062048-Improving-response-to-emergencies-involving-autistic-children/> (accessed October 23, 2018).
37. See note 5.
38. ASPR TRACIE, "No-Notice Incidents: Community Response and Media Management," (April 2018). <https://asprtracie.s3.amazonaws.com/documents/no-notice-incident-community-response.pdf> (accessed July 12, 2018).
39. Iroquois Healthcare Association, "Emergency Volunteer Management: Planning Considerations & Resources for Hospitals," (November 2017). <http://www.iroquois.org/emergency-preparedness/> (accessed July 19, 2018).
40. See note 5.
41. Los Angeles County Emergency Medical Services Agency, "Los Angeles County Family Information Center: Planning Guide for Healthcare Entities," (June 28, 2013). http://www.calhospitalprepare.org/sites/main/files/file-attachments/fic_planning_guide_final_062813_v62_0.pdf (accessed December 6, 2018).

42. See note 41.
43. See note 31.
44. American Academy of Pediatrics, "Family Reunification Following Disasters: A Planning Tool for Health Care Facilities, Version 1," (July 2018). <https://www.aap.org/en-us/Documents/AAP-Reunification-Toolkit.pdf> (accessed December 7, 2018).
45. See note 44.
46. See note 21.
47. T. Hadi, Paquet C., Ullah N., Maldin, B., "Using Health Information Exchange to Improve Family Reunification After a Mass Casualty Incident," *Health Security Journal*, (December 2018): 16(6): 416–421.
48. See note 38.
49. See note 5.
50. ASPR TRACIE, "EMTALA and Disasters," (updated May 7, 2018). <https://asprtracie.s3.amazonaws.com/documents/aspr-tracie-fact-sheet-emptala-and-disasters.pdf> (accessed October 24, 2018).
51. See note 50.
52. US Department of Veterans Affairs, "VA providing on-site assistance, counseling following Las Vegas shooting," (October 5, 2017). <https://www.blogs.va.gov/VAntage/42011/va-providing-on-site-assistance-counseling-following-las-vegas-shooting/> (accessed February 1, 2019).
53. See note 5.
54. Substance Abuse and Mental Health Services Administration, "Tips for Disaster Responders: Preventing and Managing Stress," (revised 2014). <https://store.samhsa.gov/system/files/sma14-4873.pdf> (accessed July 27, 2018).
55. Center for the Study of Traumatic Stress, "Stress Management for Health Care Providers," https://www.cstsonline.org/assets/media/documents/_archive/CSTS_stress_management_healthcare_providers.pdf (accessed July 27, 2018).
56. National Child Traumatic Stress Network and Veterans Affairs National Center for PTSD, "Psychological First Aid Field Operations Guide: Second Edition," (2006; 9). https://www.ptsd.va.gov/professional/manuals/manual-pdf/pfa/PFA_V2.pdf (accessed July 11, 2018).
57. Institute for Disaster Mental Health at SUNY New Paltz, "Disaster Mental Health Assistance in Public Health Emergencies: Evidence-Informed Practices for Public Health Workers," https://www.albany.edu/sph/assets/IDMH_Toolkit.pdf (accessed July 30, 2018).
58. See note 5.
59. Federal Emergency Management Agency, "Homeland Security Exercise and Evaluation Program (HSEEP)," April 2013). https://www.fema.gov/media-library-data/20130726-1914-25045-8890/hseep_apr13_.pdf (accessed October 24, 2018).
60. See note 58.

APPENDIX A: RESPONSE AIDS

Many facilities have developed response aids to assist personnel with specific aspects of the MCI response plan. Below is a set of pre-scripted messages and checklists for four departments: the Emergency Department, the Operating Room, Critical Care, and Radiology.

Response aids shared here were adapted with permission from tools and processes developed by NYC Health + Hospitals/Bellevue, Mount Sinai West, and Mount Sinai St. Luke's Hospital. GNYHA is grateful for their contributions.

USE OF PRE-SCRIPTED MCI MESSAGES WITH A PRE-DEFINED RECIPIENT GROUP

A busy New York City hospital has developed two pre-scripted messages, one for a Level A MCI and the second for a Level B–D MCI, per the FDNY-EMS protocol described on [PAGE 12](#). These pre-scripted messages include information about activating the facility's Hospital Incident Command System (HICS), with a HICS Level 1 indicating no Command Center Activation, and a Level 2 or higher indicating Command Center activation.

Pre-Scripted Text Messages

Level A MCI Text Message

Please be advised we have a HICS Alert 1 Activation due to a Level A MCI notification. "Type of incident" has occurred. Please stand by for further information.

Level B–D MCI Text Message

Please be advised we have a HICS Level 2 Activation, and the Command Center has been activated due to a Level B/C/D MCI notification. We may receive up to X critical and X non-critical patients. [Provide ETA if given.] Officers and Section Chiefs report to the Command Center.

Pre-Defined Recipient Group

The text messages above are sent via a mass notification system to a pre-programmed MCI Team that includes the Chief of Department, Assistant Chief of Department, and Administrator for the following areas, as well as Emergency Management and Security.

- Emergency Department
- Trauma
- Infection Control
- Respiratory Therapy
- Cardiac Surgery
- Anesthesia
- Psychiatry-Child Psych
- General Medicine
- Pathology-Blood Bank
- Cardiology
- Pediatrics and Pediatric Emergency Department
- Orthopedics
- Neuro-Surgery
- Pharmacy
- Radiology
- Social Work
- Child Life
- Admitting
- Patient Information Desk

Protocol

- Upon receipt of an MCI notification by ED personnel, the Hospital Operator (24/7 function) is alerted and tasked with sending out the pre-scripted message to the pre-defined recipient group
- For a Level B–D MCI notification, the Emergency Management Director (or designee) will physically go to the ED to assess the situation with the ED Director to decide if the internal HICS activation level needs to be raised or lowered
- All departments notified above know what actions need to be taken based on the MCI level and HICS activation level included in the pre-scripted message

DEPARTMENT-SPECIFIC MCI CHECKLISTS FOR UNIT LEADERS

Mount Sinai developed a series of checklists for unit leaders in specific departments to use during an MCI. Following are checklists for the Emergency Department, Operating Room, Critical Care, and Radiology.

Emergency Department Mass Casualty Checklist for Use by ED Unit Leader

OBJECTIVE: To safely manage a rapid influx of patients during a mass casualty event												
INSTRUCTIONS: Follow checklist, initial, and indicate time when each item is completed	INITIAL	TIME										
!!!! RECEIVE NOTIFICATION OF MASS CASUALTY INCIDENT !!!!												
<input type="checkbox"/> Make overhead page: Call all staff together for a huddle – DON'T BEGIN HUDDLE YET "All staff report immediately to the Charge Nurse Station for a huddle. This is not a drill."												
<input type="checkbox"/> Gather the MCI Supply Bag & Radios: Direct a staff member to collect items and bring them to the huddle MCI Supply Bag Location: _____ Radio Location: _____												
<input type="checkbox"/> Call Page Operator and activate MCI page: (select one below) <ul style="list-style-type: none"> • Alert – Request "Alert" when ED is aware of an unconfirmed or ongoing mass casualty incident with an <u>unknown potential to exceed hospital clinical capacity</u> • Respond – Request "Respond" when the ED has received notification of a <u>confirmed imminent threat or ongoing mass casualty incident</u> that may exceed hospital clinical capacity unless additional staff/resources immediately respond to the hospital (use "respond" for all EMS MCI alerts) 												
<input type="checkbox"/> Notify additional key departments of the mass casualty incident: <table border="0" style="width: 100%;"> <tr> <td><input type="checkbox"/> Admitting (Activate surge beds/prepare census)</td> <td>Phone #: _____</td> <td>Phone #: _____</td> </tr> <tr> <td><input type="checkbox"/> Blood Bank (Ready blood product for ED/OR)</td> <td>Phone #: _____</td> <td>Phone #: _____</td> </tr> <tr> <td><input type="checkbox"/> Operating Room (Ready ORs/pause elective cases)</td> <td>Phone #: _____</td> <td>Phone #: _____</td> </tr> </table>	<input type="checkbox"/> Admitting (Activate surge beds/prepare census)	Phone #: _____	Phone #: _____	<input type="checkbox"/> Blood Bank (Ready blood product for ED/OR)	Phone #: _____	Phone #: _____	<input type="checkbox"/> Operating Room (Ready ORs/pause elective cases)	Phone #: _____	Phone #: _____			
<input type="checkbox"/> Admitting (Activate surge beds/prepare census)	Phone #: _____	Phone #: _____										
<input type="checkbox"/> Blood Bank (Ready blood product for ED/OR)	Phone #: _____	Phone #: _____										
<input type="checkbox"/> Operating Room (Ready ORs/pause elective cases)	Phone #: _____	Phone #: _____										
<input type="checkbox"/> Confirm Emergency Dept. Leadership is aware of the mass casualty incident: <ul style="list-style-type: none"> <input type="checkbox"/> Director or Director on Call (pager #: _____) <input type="checkbox"/> Emergency Dept. Nursing Dir. is aware of event (pager #: _____) 												
<input type="checkbox"/> Confirm Sr. Administrator/Nursing Supervisor is aware of the mass casualty incident: <table border="0" style="width: 100%;"> <tr> <td>• Business hours, (Days, M-F)</td> <td>Phone #: _____</td> <td>Phone #: _____</td> </tr> <tr> <td>• Non-business hours</td> <td>Phone #: _____</td> <td>Phone #: _____</td> </tr> </table>	• Business hours, (Days, M-F)	Phone #: _____	Phone #: _____	• Non-business hours	Phone #: _____	Phone #: _____						
• Business hours, (Days, M-F)	Phone #: _____	Phone #: _____										
• Non-business hours	Phone #: _____	Phone #: _____										

Emergency Department Mass Casualty Checklist for Use by ED Unit Leader (continued)		INITIAL	TIME
<input type="checkbox"/> Repeat overhead page: Call all staff together for a huddle & follow huddle agenda			
HUDDLE AGENDA	<input type="checkbox"/> Begin Huddle (brief all staff on the incident): <ul style="list-style-type: none"> • What we know about the incident • How many expected patients, if known, or based on EMS notification • Review key initial actions: <ul style="list-style-type: none"> • Create capacity by discharging patients who can be rapidly discharged • Create capacity by identifying patients who can be immediately admitted to inpatient units • Inpatient teams and transporters to ED to assist in rapid disposition • Begin use of disaster patient tracking procedures • Security to initiate ED lock-down procedures • Breaks held until further notice, no staff leave until further notice 		
	<input type="checkbox"/> Confirm roles/distribute resources: give key personnel vests, Job Action Sheets, & radios <ul style="list-style-type: none"> • Unit Leader: _____ (Charge RN) • Deputy Unit Leader: _____ (Attending MD) • Liaison Officer: _____ (RN) • Safety Officer: _____ (Security/RN) • Admin Supervisor: _____ (Head BA) • Logistics Supervisor: _____ (SA/Handler) • Treatment Supervisor: _____ (Senior MD) • Triage Supervisor: _____ (Senior Triage) 		
	<input type="checkbox"/> Direct staff to work: advise everyone to get to work and to listen for another huddle		
<p>Hospital EOP Activation – 10-minute rule: If no response from leadership after 10 minutes, then activate the hospital Emergency Operations Plan</p>			
<input type="checkbox"/> Report ED status & number of patients to Incident Commander/Hospital Leadership: <ul style="list-style-type: none"> • Command Center Phone #: _____ 			
<input type="checkbox"/> Request a recall of off-duty staff as needed: <ul style="list-style-type: none"> • Direct Liaison Officer to activate the nursing alert system • Direct Deputy Unit Leader to have senior resident alert the Chief-on-Call • Direct Deputy Unit Leader to alert Director-on-Call 			
<input type="checkbox"/> HAZMAT/WMD event consideration: <ul style="list-style-type: none"> • Review personal protective equipment and special responses such as decontamination & isolation techniques 			
<input type="checkbox"/> Review your UNIT LEADER Job Action Sheet			
ONGOING ASSESSMENT AND RESPONSE MANAGEMENT: <ul style="list-style-type: none"> • Close-the-loop on any open/assigned items • Huddle with ED Staff as needed to maintain effective communication and situational awareness 		ONGOING	

Operating Room (OR) Mass Casualty Event Procedure for Use by OR Unit Leader

OBJECTIVE: To safely manage a rapid influx of trauma patients during a mass casualty event		
INSTRUCTIONS: Follow checklist, initial, and indicate time when each item is completed	INITIAL	TIME
!!!! RECEIVE NOTIFICATION OF MASS CASUALTY INCIDENT !!!!		
<input type="checkbox"/> Refer to Department Emergency Operations Plan/OR Mass Casualty Procedure		
<input type="checkbox"/> Confirm OR Unit Leader, Deputy Unit Leader, and OR Liaison assignments: <ul style="list-style-type: none"> • Unit Leader: (Primary): _____ (Alternate): _____ • Deputy Unit Leader: _____ • OR Liaison (to go to ED): _____ 		
<input type="checkbox"/> Alert staff in ORs to pause cases, if safe, and to hold all elective cases: <ul style="list-style-type: none"> • Temporarily hold elective cases; do not resume cases until the Emergency Department confirms they will not receive trauma cases from the event • If situation warrants, direct OR staff to finish current surgical procedures as soon as possible and prepare to receive trauma cases 		
<input type="checkbox"/> Send OR Liaison to Emergency Department (ED) to assist with triage: <ul style="list-style-type: none"> • Send an experienced practitioner to the ED to act as liaison between ED & OR • Maintain open communications between the OR Unit Leader and OR Liaison 		
<input type="checkbox"/> Activate call-in tree; recall staff as needed: <ul style="list-style-type: none"> • Assign an individual to activate the call-in tree • Use clerical personnel to make calls or use automatic paging system, if available 		
<input type="checkbox"/> Ensure adequate supplies: <ul style="list-style-type: none"> • Coordinate with anesthesia techs, blood bank, central sterile/materials management, and pharmacy personnel to ensure adequate supplies of fluids, medications, disposables, and other supplies 		
<input type="checkbox"/> Assign staff to operating rooms and determine current/future OR status and capacity: <ul style="list-style-type: none"> • Set up for trauma/emergency cases • Determine OR staffing and capacity over the next 0–2, 2–12, and 12–24 hours 		
<input type="checkbox"/> Consider assembly of Stat Teams to deploy to areas/assign to cases: <ul style="list-style-type: none"> • Staff teams with anesthesia, surgical, nursing, respiratory personnel as needed 		
<input type="checkbox"/> Notify PACU to decant by accelerating transfer of patients to units (floors/ICUs)		
<input type="checkbox"/> Report OR status to Incident Commander(s) / Hospital Command Center(s): <ul style="list-style-type: none"> • Command Center Phone #: _____ PACU Phone #: _____ 		
<input type="checkbox"/> Review your UNIT LEADER Job Action Sheet		
ONGOING ASSESSMENT AND RESPONSE MANAGEMENT:		ONGOING
<ul style="list-style-type: none"> • Close-the-loop on any open/assigned items • Huddle with OR Staff as needed to maintain effective communication and situational awareness 		

Critical Care Mass Casualty Event Procedure for Use by Critical Care Unit Leader

OBJECTIVE: To safely manage a rapid influx of patients during a mass casualty event			
INSTRUCTIONS: Follow checklist, initial, and indicate time when each item is completed	INITIAL	TIME	
!!!! RECEIVE NOTIFICATION OF MASS CASUALTY INCIDENT !!!!			
<input type="checkbox"/> Refer to Department Emergency Operations Plan/Critical Care Mass Casualty Procedure			
<input type="checkbox"/> Make overhead page: Call all staff together for a huddle – DON'T BEGIN HUDDLE YET "All staff report immediately to the ICU middle for a huddle. This is not a drill."			
<input type="checkbox"/> Gather the MCI Supply Bag & Radios: Direct a staff member to collect items and bring them to the huddle MCI Supply Bag Location: _____ Radio Location: _____			
<input type="checkbox"/> Repeat overhead page: Call all staff together for a huddle & follow huddle agenda			
HUDDLE AGENDA	<input type="checkbox"/> Begin Huddle (brief all staff on the incident): <ul style="list-style-type: none"> • How many expected patients, if known • Review key initial actions: <ul style="list-style-type: none"> • Identify all open beds, create capacity by doubling up patients within rooms as needed • Create capacity by identifying patients who can be transferred to other units (i.e., stepdown) • Prepare for incoming patients by inventorying, gathering, and requesting supplies and clean equipment (IV pumps/poles, transport monitors, rapid transfusers, extra bedside modules/cables) • Maintain roster of patients transferred out and/or admitted • Manage nursing ratio, which may change in order to meet demands of the disaster • Communicate needs and status to the Unit Leader who will contact the hospital command center • Nurse Manager – confirm calling in staff • No staff to leave until further notice, no breaks until further notice 		
	<input type="checkbox"/> Confirm Critical Care Unit Leader and Deputy Unit Leader assignments: <ul style="list-style-type: none"> • Unit Leader: (Primary): _____ (Alternate): _____ • Deputy Unit Leader: _____ • Unit Liaison (respond to ED/see details below): _____ 		
<input type="checkbox"/> Critical Care Liaison to ED to communicate with the Clinical Leadership Group (CLG) <ul style="list-style-type: none"> • Critical Care MD covering the emergency department will communicate Critical Care Unit status with the ED Deputy Unit Leader (ED Attending MD) • Exchange contact information – Unit Leader to be available at ext.: _____ • Maintain open communications between the CLG and Critical Care Unit Leader, establish a schedule for recurring check-ins 			

Critical Care Mass Casualty Event Procedure for Use by Critical Care Unit Leader (continued)	INITIAL	TIME
<input type="checkbox"/> Assign nurses to patients based on acuity and disaster <ul style="list-style-type: none"> • Assign nursing assistant to prepare available rooms • Assign unit secretary to direct families to outside waiting room 		
<input type="checkbox"/> Activate call-in tree; recall staff as needed		
<input type="checkbox"/> Report unit status & number of patients to Incident Commander/Hospital Leadership: <ul style="list-style-type: none"> • Command Center Phone #: _____ 		
<input type="checkbox"/> Review your UNIT LEADER Job Action Sheet		
ONGOING ASSESSMENT AND RESPONSE MANAGEMENT: <ul style="list-style-type: none"> • Close-the-loop on any open/assigned items • Huddle with Critical Care staff as needed to maintain effective communication and situational awareness 	ONGOING	

Radiology Mass Casualty Event Procedure for Use by Radiology Unit Leader

OBJECTIVE: To efficiently image and diagnose a rapid influx of trauma patients during a mass casualty event		
INSTRUCTIONS: Follow checklist, initial, and indicate time when each item is completed	INITIAL	TIME
!!!! RECEIVE NOTIFICATION OF MASS CASUALTY INCIDENT !!!!		
<input type="checkbox"/> Confirm Radiology Unit Leader and Deputy Unit Leader assignments: <ul style="list-style-type: none"> • Unit Leader: (Primary): _____ (Alternate): _____ • Deputy Radiology Unit Leader: _____ 		
<input type="checkbox"/> Activate call-in tree; recall staff as needed <ul style="list-style-type: none"> • ER Resident notifies ER Attending Radiologist, Chief Resident(s), IR house staff, and Lead Tech • ER Attending radiologist will notify attending leadership • Chief Resident(s) will notify additional resident physician staff • Lead Tech will notify his or her supervisor 		
<input type="checkbox"/> ED Radiology Resident to communicate with a member of Clinical Leadership Group (CLG) <ul style="list-style-type: none"> • Radiology resident covering the emergency department will communicate acute radiological findings with the Deputy Unit Leader in the ED • Maintain open communications between the CLG and Radiology Unit Leader • Exchange contact information – Radiology to be available at ext.: _____ 		
<input type="checkbox"/> Tech Supervisor assign staff to X Ray and CT Scanner rooms and determine current/future status and capacity: <ul style="list-style-type: none"> • Determine Radiology Department staffing and capacity over the next 0–2, 2–12, and 12–24 hours 		

Radiology Mass Casualty Event Procedure for Use by Radiology Unit Leader (continued)	INITIAL	TIME
<input type="checkbox"/> Lead Tech alerts staff at the front desks and technologists to pause cases, if safe, and to hold all non-emergent imaging for inpatients and outpatients: <ul style="list-style-type: none"> • Temporarily hold non-emergent imaging; <u>do not</u> resume non-emergent imaging until the Emergency Department confirms they will not receive trauma cases from the event • If situation warrants, direct radiology technologists to finish scanning these patients as soon as possible and prepare to receive trauma cases 		
<input type="checkbox"/> Lead Tech ensures adequate supplies: <ul style="list-style-type: none"> • Coordinate with diagnostic and interventional radiology techs and nurses, central sterile/materials management, and pharmacy personnel to ensure adequate supplies of fluids, contrast material, disposables, and other supplies 		
<input type="checkbox"/> Report Radiology status patients to Incident Commander/Hospital Leadership: <ul style="list-style-type: none"> • Command Center Phone #: _____ 		
<input type="checkbox"/> Review your UNIT LEADER Job Action Sheet		
ONGOING ASSESSMENT AND RESPONSE MANAGEMENT: <ul style="list-style-type: none"> • Close-the-loop on any open/assigned items • Huddle with Radiology Staff as needed to maintain effective communication and situational awareness 		ONGOING

APPENDIX B: NYCEM SITUATIONAL AWARENESS APPLICATION

(NYC health care facilities only)



New York City Emergency Management
165 Cadman Plaza East
Brooklyn, NY 11201



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APPENDIX C: SOCIAL MEDIA MONITORING

Several tools are available to help hospitals monitor situational awareness and correct misinformation during MCIs. Using services such as the social media monitoring tools listed below, hospital or health system staff can generate a customized social media dashboard that displays real-time updates. To enhance situational awareness, hospitals and health systems can use a social media monitoring system to track relevant, MCI-related keywords and hashtags such as “shooting” or “fire” within a specified geographic radius. Hospitals and systems may also choose to monitor local news sources to gather further information and address any incorrect reporting about the hospital. Hospital administration can also use social media to communicate with employees; for example, an employee-specific hashtag could be created to share key updates about staffing needs, security measures, and other information. Any social media-based communication should be integrated with other staff communication plans.

Keeping Information Accurate during Crisis Events

A hospital can engage in rumor control by tracking mentions of their institution’s name, monitoring employee content, and posting official responses to misinformation in a timely and appropriate manner. It is recommended that social media monitoring staff avoid responding to individual questions or comments as much as possible; instead, it is advisable to release official messages that address common concerns and rumors voiced repeatedly and by multiple users. However, it may be appropriate to respond to individual users who appear to be particularly influential—for example, those with exceptionally large followings and/or whose content receives significant attention and redistribution.

If a hospital or health system decides to build out social media monitoring during emergency events, this capability should be integrated into the HICS structure, with particular staff designated to fulfill the role. A social media monitoring team would likely consist of two to seven staff members in a designated space, with staffing variation based on the needs and size of each hospital. Government, public, and community affairs staff are ideal for these positions, as are staff involved in marketing and communications. Multiple computers and monitors may be required to track trends and developments across several platforms in real time.

If a social media monitoring team is established and activated, the division of labor among staff members may vary depending on the magnitude and nature of the emergency event, as well as the size of the team. If appropriate and feasible, each team member may be assigned to monitor a specific social media platform or news outlet, while others may be responsible for releasing official responses to rumors and questions about the hospital or system on social media and in the news. A hospital or health system may designate one staff member as the social media monitoring team lead to whom other team members report. In turn, the team lead may report to the hospital or system’s Public Information Officer or another administrative leader with a similar purview.

Key actions and considerations for hospitals establishing social media monitoring systems are included below:

- Strategy
 - Identify objectives of social media monitoring
 - Identify desired social media platforms for monitoring and response
 - Establish desired style and voice of official communications during MCIs

- Develop general statements and keywords that can be customized for messaging and monitoring during MCIs
- Operations
 - Identify staffing requirements, roles, and responsibilities
 - Establish chain of command for approval of official messages and notification of urgent concerns
 - Develop training and staffing plans to allocate staff and resources to social media monitoring during MCIs
- Engagement
 - Establish and regularly update a centralized page linking to official emergency-related information sources
 - Respond to rumors, questions, and comments accurately, calmly, and in a timely manner
 - Monitor community feedback to assess reception of official communications

The following documents provide additional guidance and insight for the development, activation, and operation of social media monitoring systems during an MCI, with a brief description accompanying each resource.

RESOURCES FOR ESTABLISHING SOCIAL MEDIA MONITORING SYSTEMS

- Social Media & Disaster Communications Checklist: Highlights key actions to engage in social media monitoring for situational awareness and information management, both before and during emergencies. <https://www.ajg.com/media/1472380/Social-Media-Emergency-Checklist.pdf>
- Using Social Media for Enhanced Situational Awareness and Decision Support: Virtual Social Media Working Group and DHS First Responders Group presents cases studies on pages 11–18 that show how social media monitoring can be used for communications, rumor management, and situational awareness. <https://www.hsdl.org/?view&did=755891>

The following lists are examples of free and fee-based tools and services that can facilitate social media monitoring efforts in hospitals and health systems during MCIs, with a brief description for each item.

FREE SOCIAL MEDIA MONITORING TOOLS

- Google Alerts allows users to monitor online content for specific topics by creating tailored alerts. Hospitals can choose to receive e-mail alerts whenever new results for a specific topic appear in Google Search. <https://www.google.com/alerts>
- Google Trends allows users to monitor Google Search trends by keyword, with filters for geography, timeframe, and media source. <https://trends.google.com/trends/>
- Social Mention aggregates content from more than 100 social and news media platforms, allowing users to search by keyword and sort by timeframe and media category. <http://www.socialmention.com/>
- TweetDeck allows users to monitor keyword searches and hashtags on Twitter in real-time. Hospital staff can create a customizable dashboard to display trends, hashtags, search results, and other content based on tailored filters and channels. <https://tweetdeck.twitter.com/>
- Twitterfall displays new tweets in real time, with customizable filters for topics, exclusions, and geolocation. Hospital staff can use Twitterfall to monitor Twitter content for specific keywords within a chosen radius. Login required. <https://twitterfall.com/>

FEE-BASED SOCIAL MEDIA MONITORING TOOLS

- Sysomos is a cross-platform tool that allows users to search, monitor, and analyze social media content in real time. <https://sysomos.com/>
- Hootsuite capabilities include customizable social media search queries filtered by keyword and location, as well as unlimited custom streams of social media content updated in real time. <https://hootsuite.com/>
- Trendsmap provides real-time geographic visualization of trending Twitter topics, linking Twitter content to a dynamic map display. Paid functionalities include filtering by timeframe, location, and type of Twitter content. <https://www.trendsmap.com/>
- Geofeedia provides location-based social media monitoring functionalities, including real-time mapping of aggregated user-generated social media content. <https://geofeedia.com/>
- Ushahidi collects data from Twitter, e-mail, and SMS and displays it in customizable maps based on tailored filters and saved searches. Hospital staff can use this tool for crowdsourced crisis mapping and to receive alerts via e-mail and/or SMS. <https://www.ushahidi.com/>

APPENDIX D:

HOSPITAL EMERGENCY RADIO OUTGOING MESSAGE PILOT PROGRAM (NYC Program)

At the start of 2016, New York City Emergency Management (NYCEM) Watch Command began transmitting a series of messages via the NYC Hospital Emergency Radio Network for any incident deemed a 10-60 (major response event) by the Fire Department of the City of New York (FDNY). As of November 1, 2016, NYCEM Watch Command will also transmit such messages for any event FDNY deemed a Level C or Level D Mass Casualty Incident (MCI). Information about MCI levels and this expansion of the initial pilot program is described in detail in the highlighted section below.

Beginning January 1, 2016, the NYCEM Watch Command will transmit a series of messages via the NYC Hospital Emergency Radio Network for any event the Fire Department of the City of New York (FDNY) deems a 10-60 (major response event). Transmission of these messages—a pilot program that NYCEM has committed to for one year—is a feature being added to the existing Hospital Emergency Radio Program. Watch Command transmissions will be one-way communications, so hospitals should NOT respond to the communication to acknowledge receipt or ask additional questions. This pilot program has no impact on the current FDNY notification protocols used to communicate with hospitals in close vicinity to an emergency incident. Those protocols remain the same.

The purpose of this document is to help NYC hospitals think through adjustments to their internal procedures that the pilot program may warrant.

THE HOSPITAL EMERGENCY RADIO NETWORK

Since 1999, all 911-receiving hospitals in New York City have been connected to NYCEM's Watch Command via an 800-megahertz radio network. The radio network serves as a communication mode of last resort for NYC hospitals, to be used only if all other forms of outgoing communication have failed. During Hurricane Irene in 2011 and Hurricane Sandy in 2012, a handful of hospitals that lost power were able to maintain communication with response agencies via their emergency radios.

Depending on the facility, radios are typically kept within the Emergency Department, a security checkpoint, or within any appropriate area that is monitored 24/7. In order to maintain the radio network's functionality, Watch Command conducts periodic radio checks. The current monitoring program involves several unscheduled radio checks per week, with a monthly report provided to each participating hospital.

There have been previous instances when Watch Command has transmitted emergency incident information over the Hospital Emergency Radio Network, such as when US Airways Flight 1549 made an emergency landing in the Hudson River. This pilot program introduces a formalized protocol for the sharing of high-impact emergency incident information with NYC hospitals.

GNYHA/NYCEM HOSPITAL EMERGENCY RADIO SUBCOMMITTEE

In May 2015, Watch Command Director Ben Krakauer presented on the Hospital Emergency Radio Network at GNYHA's Emergency Preparedness Coordinating Council meeting. The idea was raised to transmit outgoing messages via the radio network to increase situational awareness for high-impact emergency events. In response, GNYHA and NYCEM formed a Hospital Emergency Radio Subcommittee.

The Subcommittee, which comprises representatives from several NYC hospitals, FDNY-EMS, and the Regional Emergency Medical Services Council of New York City (REMSCO), has met a total of three times. During these meetings, subcommittee members worked to define high-impact emergency events of potential consequence to hospitals, and examined current notification categories used by Watch Command as part of its All Call and Notify NYC e-mail-based programs. Given the availability of information through these other programs, subcommittee members felt it was important to reserve use of the radios exclusively for emergency incidents that may require an immediate change in a facility's level of preparedness, whether to a heightened level of monitoring or activation.

FDNY 10-60 CODES

FDNY uses the 10-60 code for major response events, which triggers a series of actions that bring significant resources to bear to respond to and manage an incident. With the assistance of FDNY and Watch Command, the Subcommittee examined every 10-60 incident for 2015 to determine if any would warrant outgoing messages to hospitals. These incidents included building explosions/collapses, a crane collapse, a scaffolding collapse, and motor vehicles striking dwellings. Nearly all of the 10-60s produced multiple patients and garnered significant media attention. On average, there are eight to 12 10-60 events in a given calendar year.

Subcommittee members concluded that it would be beneficial to receive an official communication from Watch Command during such incidents. Even if a particular facility is unlikely to be impacted by the incident, the message would underscore the incident's seriousness and enable the facility to maintain heightened awareness, and be better positioned to answer questions from leadership. The outgoing messages would also enable potentially impacted facilities to more quickly activate their internal response plans and garner needed resources and staff.

The pilot program described in this document does NOT replace FDNY notification protocols used to communicate with hospitals in close vicinity to an emergency incident. Those protocols remain the same. Rather, the purpose of Watch Command messages is to increase overall situational awareness among NYC hospitals.

MCI Levels

As of August 1, 2016, FDNY uses a four-level categorization system for MCIs. FDNY determines the MCI level based on the type and severity of the incident, and the potential number of patients. Use of these levels informs how FDNY responds and provides additional situational awareness to hospitals.

- **Level A (Minor to Moderate) MCI:** The vast majority of MCIs in NYC are classified as a Level A (Moderate MCI). This is a relatively static incident producing or with the potential to produce a small number of critical patients. *Examples of Level A MCIs: motor vehicle accident or residential fire with small numbers of potential patients.*
- **Level B (Significant) MCI:** This is a relatively static incident producing or with the potential to produce significant numbers of critical patients. *Examples of Level B MCIs: bus accident, small residential building explosion/collapse.*

- **Level C (Major) MCI:** This is a dynamic incident producing or with the potential to produce a substantial number of critical patients. *Examples of Level C MCIs: mass shooting, medium to large building explosion/collapse.*
- **Level D (Catastrophic) MCI:** A catastrophic event will likely overwhelm the health care system. Hospitals will be expected to redirect all efforts to incident response. Rather than rely solely on a notification call from FDNY Emergency Dispatch for such an event, hospitals should instead rely on notification sources such as NYCEM Watch Command hospital radio transmittals, NYCEM All Call email notifications, and information from credible media outlets. All hospitals should prepare to receive patients. *Examples of Level D MCIs: World Trade Center attack, intentional release of poison gas in subway system.*

For more information about the above MCI levels, and new EMS-to-hospital protocols enacted on August 1, 2016, please review EPN-23 (dated July 27, 2016).

MCI Levels and 10-60s

MCI Levels provide information about incident severity and potential numbers of patients, whereas the 10-60 code indicates an incident that requires significant FDNY resources. Some incidents that are deemed a 10-60 may produce very few patients, such as the January 2016 crane collapse. While incidents deemed a Level C or Level D MCI by FDNY (which are expected to be rare) may also be deemed a 10-60, events such as a mass shooting may not be deemed a 10-60. With these distinctions in mind, it is important that staff responsible for monitoring the hospital emergency radio listen carefully to transmittal messages to gain information about incident specifics that can inform an appropriate hospital response.

SAMPLE MESSAGES

When an FDNY 10-60 code is transmitted, hospitals can anticipate receiving a series of related messages—an initial message, one or multiple update messages (depending on the length of the incident), and a final message. As with all emergencies, information is dynamic and could change significantly throughout the course of the incident.

Because FDNY operations can continue for several days, the messages provided to hospitals will mirror the actions of FDNY's Medical Branch, meaning that a final message will coincide with the de-escalation of on-scene medical activities.

Again, Watch Command messages are one-way communications. [Hospitals should NOT respond to the communication to acknowledge receipt or to ask additional questions.](#) If a hospital needs to communicate with Watch Command, hospital staff can call Watch Command.

Below are sample messages a hospital could expect to receive during the course of a 10-60 incident. All transmissions will be preceded by 2-3 alert tones.

- **Initial Message:** "This is NYC Emergency Management Watch Command with an **initial** major incident notification. FDNY has transmitted a major incident response for <insert type of incident> at <insert incident location with borough>. <Add any additional relevant information.> Please continue to monitor your radio for additional information."
- **Update Message:** "This is NYC Emergency Management Watch Command with an **update** on the major incident at <insert location with borough>. Units on the scene are reporting <insert situation report and current patient count>. Please continue to monitor your radio for additional information."

- **Final Message:** “This is NYC Emergency Management Watch Command with a **final** update on the major incident at <insert location with borough>. <Insert final update.> This will be the last notification about this incident.”

The radio transmissions are simply one mode of communication. Similar informational messages will be provided through the NYCEM All Call and Notify NYC programs. If an individual monitoring the emergency radio did not hear the entire message, he/she should refer to these e-mail-based communications for complete information.

INTERNAL HOSPITAL PROCEDURES

With the launch of this pilot program in January 2016, NYC hospitals must ensure that appropriate communication and activation protocols are in place to responsibly receive and manage information about FDNY 10-60 or Level C-D MCI events received through the hospital emergency radio network. We encourage hospitals to review the questions below to determine if modifications to current protocols may be warranted.

Monitoring of Hospital Emergency Radio

- Who within your institution currently monitors the Hospital Emergency Radio? Is the radio monitored 24 hours a day, 7 days a week?
- How will you train staff in that role to listen for 10-60 or Level C-D MCI notifications from NYCEM Watch Command?

Acting on Information Received

- When a 10-60 or Level C-D MCI notification is received, what steps will staff monitoring the hospital emergency radio be expected to take? Is there a procedure for determining what actions should be taken? For example, if the 10-60 incident or Level C-D MCI is in the same borough as your facility, will he/she do something different than if it is in another borough? What will the procedure be for a neighboring borough? Does the procedure vary based on the size/scope of the incident?
- Are different actions taken by that staff person during business hours vs. at night and on weekends?
- If a staff change occurs while a 10-60 or Level C-D MCI event is ongoing, what will the handoff procedures be?

Communication

- Will a 10-60 or Level C-D MCI notification warrant a communication to hospital leadership? Will communication be warranted only if the 10-60 or Level C-D MCI has occurred in the same borough or a neighboring borough of the facility?
- What will happen when a final notification for the incident is received from Watch Command?

Activation Decisions

- How will appropriate staff (e.g., AOD, Emergency Managers) determine what actions need to be taken in response to the transmission of a 10-60 or Level C-D MCI notification?
- Will a 10-60 or Level C-D MCI notification alone trigger activation of the Hospital Incident Command System or will other information be required before such a decision is made?
- How will updates and final 10-60 or Level C-D MCI messages be integrated into activation and demobilization decisions?

PILOT PROGRAM MONITORING AND EVALUATION

GNYHA will monitor this pilot program's implementation and, with NYCEM evaluate its effectiveness throughout 2016, to allow for needed adjustments on the part of Watch Command and hospitals. Monitoring and evaluation will be an ongoing process, with feedback collected from hospitals after each 10-60 or Level C-D MCI incident.

In order to evaluate hospital responses to the 10-60 or Level C-D MCI incident notification, GNYHA asks all hospitals to consider the following questions:

- Did the person monitoring the radio in your facility receive the initial message and follow-up messages?
- Did the person monitoring the radio understand how to communicate the information he/she received to others in your facility?
- Did your facility take any preparedness actions based on the information received?
- If so, what actions?
- Was it clear to your facility when the incident was over?
- Will you be making any modifications to your internal procedures based on this 10-60 or Level C-D MCI incident?
- If so, what modifications?
- Do you have any suggestions for making the pilot program more effective?

Based on the feedback received throughout the year, at the end of 2016 NYCEM, GNYHA, and members of the Hospital Emergency Radio Subcommittee will discuss the merits of making the FDNY 10-60/Level C-D MCI Notification Protocol a permanent fixture of the Hospital Emergency Radio Program.



A PDF of this guidance document is available for download at:

<https://www.gnyha.org/tool/hospital-emergency-radio-outgoing-message-pilot-program/>

APPENDIX E: EMS-TO-HOSPITAL RESPONSE PROCESS FOR MASS CASUALTY INCIDENT (NYC Protocol)

The Fire Department of the City of New York (FDNY) began using a four-level categorization system for Mass Casualty Incidents (MCI) on Monday, August 1, 2016. Use of these levels informs EMS patient transportation decisions and provides hospitals with additional situational awareness.

The MCI levels are:



Each level is associated with predetermined numbers of patients that hospitals should be prepared to receive during the MCI.

This document is designed to help New York City 911-receiving hospitals consider adjustments to any internal procedures that may be warranted by these changes.

PREVIOUS PROCESS FOR ASSESSING HOSPITAL BED AVAILABILITY

In New York City, an MCI is an incident that has the potential to produce five or more patients. MCIs happen often in NYC, but rarely produce many patients.

An FDNY officer present at the scene will declare it to be an MCI. Previously, the FDNY officer, after arriving on the scene, transmitted the necessary information about the incident to FDNY Emergency Medical Dispatch (EMD), which, in turn, contacted the Emergency Departments (ED) of the three closest hospitals. If none of these hospitals was designated as a Level 1 or Level 2 Trauma Center, then the closest trauma center was also contacted. After receiving the alert about the MCI, ED staff would be asked how many critical and non-critical patients they could accept at that time. During large or complex MCIs, EMD might contact additional hospitals regarding their ability to receive patients.

The hospital staff member responsible for answering the EMD assessment calls, and how that staff person determined the number of critical and non-critical patients their facility could receive varied by location. Acknowledging that the process did not provide useful information for EDs or FDNY, FDNY and the Greater New York Hospital Association (GNYHA) convened a workgroup in spring 2016 to examine the issue and develop recommendations.

FDNY-GNYHA HOSPITAL BED AVAILABILITY WORKGROUP

Meeting regularly since March 2016, the Hospital Bed Availability Workgroup includes NYC Emergency Management (NYCEM), FDNY, GNYHA, and hospital representatives with ED and Emergency Medical Services (EMS) experience.

Together, workgroup members explored current NYC MCI response processes, identified areas for improvement, and reviewed information collected by FDNY on systems and methods used in other major cities across the United States. These discussions resulted in two recommendations:

- Creation of four MCI Levels (Level A for Minimal to Moderate, Level B for Significant, Level C for Major, and Level D for Catastrophic) that reflect the severity and stability of the incident, the total number of expected patients, and a minimum number of hospitals to be notified regarding receipt of patients.
- Use of a Fixed Allotment Model, whereby FDNY and each 911-receiving hospital agree on a maximum number of critical and non-critical patients to be transported to that hospital at each MCI level.

FDNY MCI LEVELS

FDNY's EMD staff quickly gathers information about the nature and severity of an incident from various sources, including 911 callers, other agency reports (such as the NYPD), and EMS officers and providers on the scene. EMD will make an initial determination regarding the MCI level, and begin hospital notifications. The level may be modified as additional information and more precise patient numbers are received.

Level A (Minimal to Moderate) MCI

The vast majority of MCIs in NYC will be classified as a Level A (Minimal to Moderate MCI). This is a relatively static incident producing or with the potential to produce a small number of critical patients. Hospitals near the MCI (minimum of 2, including the closest Level 1 or 2 Trauma Center) are called by EMD and told to prepare to accept patients up to the hospital's Level A fixed allotment.

Examples of Level A MCIs: motor vehicle accident or residential fire with small numbers of potential patients.

Level B (Significant) MCI

This is a relatively static incident producing or with the potential to produce significant numbers of critical patients. Hospitals in a broader vicinity of the MCI (minimum of 3) are called by EMD and told to prepare to accept patients up to the hospital's Level B fixed allotment.

Examples of Level B MCIs: bus accident, small residential building explosion/collapse.

Level C (Major) MCI

This is a dynamic incident producing or with the potential to produce a substantial number of critical patients. Hospitals in a still broader vicinity of the MCI (minimum of 5) are called by EMD and told to prepare to accept patients up to the hospital's Level C fixed allotment.

Examples of Level C MCIs: mass shooting, medium to large building explosion/collapse.

Level D (Catastrophic) MCI

This is a catastrophic event that will likely overwhelm the health care system. Hospitals are expected to redirect all efforts to incident response. Rather than rely solely upon a notification call from EMD for such an event, hospitals should instead rely on notification sources such as NYCEM Watch Command hospital radio transmittals, NYCEM All Call email notifications, and information from credible media outlets. All hospitals should prepare to receive patients above their Level C fixed allotment.

Examples of Level D MCIs: World Trade Center attack, intentional release of poison gas in subway system.

EMS officers may attempt to have ambulances bypass the hospital(s) in closest proximity to the MCI during Level C and Level D MCIs. This is because the hospitals in closer proximity are likely to receive many victims who arrive on their own.

EMD NOTIFICATION CALLS TO HOSPITAL EMERGENCY DEPARTMENTS

- When EMD calls a hospital ED to make a notification, the EMD staff person will provide the following: the MCI level; the location of the incident; the nature of the incident (whether it is a fire or a motor vehicle crash, for example); and what kind of patients are involved, if known (for example, whether adults, pediatrics or both).
- As more information about the incident is provided to EMD, the decision could be made to upgrade or downgrade the MCI level. If the change in MCI level is expected to alter the estimated number of patients sent to a particular hospital, then that hospital will receive another call to indicate the level change.
- If two MCIs occur in proximity to a single hospital, which is likely to receive patients from both incidents, then that hospital will receive separate calls, one for each incident.
- The hospital will receive a “stand down” call from EMD when no additional patients are expected from an MCI. If the hospital has received patients from more than one MCI in the vicinity, then the stand down call would occur when no additional patients are expected from the final incident.

Ambulance crews are expected to continue their current hospital notification protocols when transporting critical patients. The crews will provide notifications for both critical patients associated with an MCI, and for critical patients not associated with an MCI. The hospital notification protocol for transporting critical patients has not changed.

ONE MCI MAY IMPACT HOSPITALS DIFFERENTLY

FDNY EMD determines the MCI level based on the incident’s severity and the potential number of patients. EMD then notifies area hospitals using the protocols detailed above according to the fixed allotments described below. For example, during a Level B MCI, a minimum of three nearby hospitals will immediately receive a Level B notification.

However, if an MCI produces a larger number of patients than expected, or if the MCI escalates, then it is possible that a second wave of additional hospitals will be notified further into the incident. In such a case, EMD’s notifications would reflect each particular hospital’s fixed allotment. Therefore, during prolonged incidents with large numbers of patients, it is possible that a second wave of hospitals may receive a lower-level notification than the initial hospitals received.

NYC HOSPITAL EMERGENCY RADIO PROGRAM

As of January 1, 2016, NYCEM's Watch Command transmits a series of messages via the NYC Hospital Emergency Radio Network for any event the FDNY deems a 10-60 (major incident response). As of November 1, 2016, NYCEM's Watch Command also transmits messages via the NYC Hospital Emergency Radio Network for any event deemed by the FDNY as a Level C or Level D MCI. This is an expansion of the pilot program. For more information, hospitals are urged to review the previously provided guidance document regarding the [HOSPITAL EMERGENCY RADIO OUTGOING MESSAGE PROGRAM](#) to ensure that any information received via the hospital emergency radio is appropriately communicated and acted upon.

INTEGRATION WITH EXISTING NYC PLANS AND PROTOCOLS

Certain MCI events, including large fires and explosions, may also trigger the activation of existing NYC plans and protocols such as the draft NYC Burn Protocol. In such instances, impacted hospitals would receive additional notifications and communications from FDNY about the activation of procedures associated with these plans.

HOSPITAL FIXED ALLOTMENTS

Based on similar systems in other large jurisdictions, including Houston, Texas, and Anaheim, California, the workgroup recommends defining a maximum number of critical and non-critical patients for:

- Level A (Minimal to Moderate) MCI
- Level B (Significant) MCI
- Level C (Major) MCI

There is no fixed allotment For Level D (Catastrophic) MCIs. In the case of a Level D MCI, hospitals should do all they can to prepare for large numbers of critical and non-critical patients.

After significant discussion, the workgroup determined that the fixed allotments should be based on a small number of hospital-specific variables, including average daily ED visits and trauma center designation. The numbers were developed first using two bands based on average daily ED visits* (≤ 200 and > 200). Within each band, a separate, slightly higher patient count was developed for Level 1 or Level 2 trauma centers. The number of critical patients is low, given the intensity of resources that may be needed. Conversely, the number of non-critical less resource-intensive patients is higher.

The numbers in the following chart reflect EMS transport expectations, and do not take into account patients who may arrive on their own. If a hospital becomes overwhelmed with patients who arrive on their own, and cannot safely receive additional patients via EMS transports, then the facility should contact the Fire Department Operations Center at 718-999-7062 to request diversion status—though FDNY may not be able to place hospitals on diversion during large MCIs.

Based on the above calculations, all 911-receiving hospitals were assigned patient fixed allotments for Level A, Level B, and Level C MCIs. These were communicated via a letter sent to each hospital CEO. The new process went into effect August 1, 2016.

* Source: NYC Department of Health and Mental Hygiene ED Syndromic Surveillance System, 2016 data

Average Daily ED Visits	Critical Patients		Non-Critical Patients	
	Non-Trauma Hospital	Trauma Hospital (Level 1 or 2)	Non-Trauma Hospital	Trauma Hospital (Level 1 or 2)
LEVEL A (Minimal to Moderate)				
≤200	1	NA	20	NA
>200	2	3	30	30
LEVEL B (Significant)				
≤200	2	NA	30	NA
>200	4	6	50	50
LEVEL C (Major)				
≤200	4	NA	40	NA
>200	6	9	70	70

FREESTANDING EDS

A small number of stand-alone EDs participate in the NYC 911 system. Because these facilities do not have Operating Room capabilities, their fixed allotments were amended to include only non-critical patients.

PEDIATRIC CONSIDERATIONS

MCI in New York City may produce all adult patients, all pediatric patients, or a mix of both. As a result, the decision was made to fold pediatric considerations into the current fixed allotment framework. When a notification call is made to a hospital, it is done via the ED's main notification phone. At that time, EMD shares as much information as possible, including patient type: pediatric, adult, or both. The hospital must coordinate staffing and resources across pediatric and adult service areas.

A handful of stand-alone pediatric EDs exist in NYC. Fixed allotments based on the average daily ED census were developed in consultation with these facilities.

INTERNAL HOSPITAL PROCEDURES

NYC 911-receiving hospitals should ensure that the appropriate communication and activation protocols are in place to respond to the FDNY's EMD notification calls for Level A, B, C, and D MCIs. To help hospitals implement these fixed allotments, FDNY developed a series of MCI Notification Level posters for placement in the ED. Hospitals may want to consider further modifying the posters to include institution-specific procedures or checklists.

Hospitals are encouraged to review the below questions to determine whether modifications to current protocols are warranted.

Monitoring the ED Red Phone

- Who in your ED answers the red phone?
- How have you trained relevant staff to respond appropriately to the new notification process?

Acting on EMD MCI Calls

- When an ED staff member receives the EMD's notification call about an MCI, what steps is the staff member expected to take?
- How do the actions differ for a Level A notification compared with a Level B or Level C notification?
- Is the staff person expected to respond differently during business hours compared with evenings or on weekends?
- If a call occurs in the middle of a staff change, how does the response vary?
- What is the expected response of other staff members for each notification level, including ED staff? The Administrator on Duty (AOD)?

Communication

- Who beyond the ED is notified when a Level A MCI call is received? Who is notified for a Level B or a Level C?
- If hospital staff members learn of an MCI via other means, such as a credible media source or the hospital emergency radio, how should the ED staff and other staff be notified?
- How are various internal communication systems used during such an incident? Are there pre-scripted messages? If not, should they be developed?

Activation Decisions

- How will appropriate staff (e.g., AOD, ED Director, Emergency Managers) determine which actions need to be taken in response to a Level A, Level B, or Level C MCI?
- Will notification of a Level B or Level C MCI automatically trigger activation of the Hospital Incident Command System (HICS), or will other information be required before such a decision is made? Would HICS ever be activated for a Level A MCI call? If so, under what circumstances?
- What additional decisions need to be considered for a Level B or Level C MCI notification? How will decisions be made about recalling clinical staff to the hospital? How will decisions be made about clearing or preserving operating rooms? What about issues related to hospital security?

Thank you for helping implement the new EMS-to-hospital response processes for MCIs. We believe these changes have already resulted in a more streamlined communication system between FDNY and 911-receiving hospitals, and an increased ability for hospitals to plan and prepare for MCIs.



A PDF of this guidance document is available for download at:

<https://www.gnyha.org/tool/ems-to-hospital-response-process-for-mass-casualty-incidents/>

APPENDIX F: PRE-HOSPITAL TO HOSPITAL COMMUNICATION PROTOCOLS FOR MCIs (NYC Protocol)

Results from the First Year of Implementation

EXPLANATION OF PRE-HOSPITAL-TO-HOSPITAL COMMUNICATION PROTOCOLS FOR MCIS

In August 2016, the Fire Department of the City of New York (FDNY) began using a four-level categorization system for Mass Casualty Incidents (MCIs). In New York City, an MCI is an event with the potential to produce five or more patients. The new protocol was developed through a collaborative workgroup process co-led by FDNY and Greater New York Hospital Association (GNYHA). Workgroup members explored existing New York City MCI response processes, identified areas for improvement, and reviewed information collected by FDNY on systems and methods that other major US cities use. The workgroup ultimately recommended the development of a four-level categorization system, with each level associated with predetermined numbers of critical and non-critical patients hospitals should be prepared to receive from EMS during the MCI. The use of MCI levels (see [PAGE 85](#)) informs EMS patient transportation decisions and gives hospitals additional situational awareness.

As illustrated in the table on [PAGE 89](#), the allotments vary based on average daily emergency department (ED) visits and trauma center designation.

Based on these variables, all 911-receiving hospitals were assigned patient-fixed allotments for Level A, Level B, and Level C MCIs, which FDNY communicated via a letter to each hospital chief executive officer in July 2016. The allotted numbers reflect EMS transport expectations and do not take into account patients who may arrive on their own.

It is important to note that in many recent mass shootings, the large majority of victims arrived by means other than ambulances.

ANALYSIS OF THE FIRST YEAR OF PROTOCOL IMPLEMENTATION

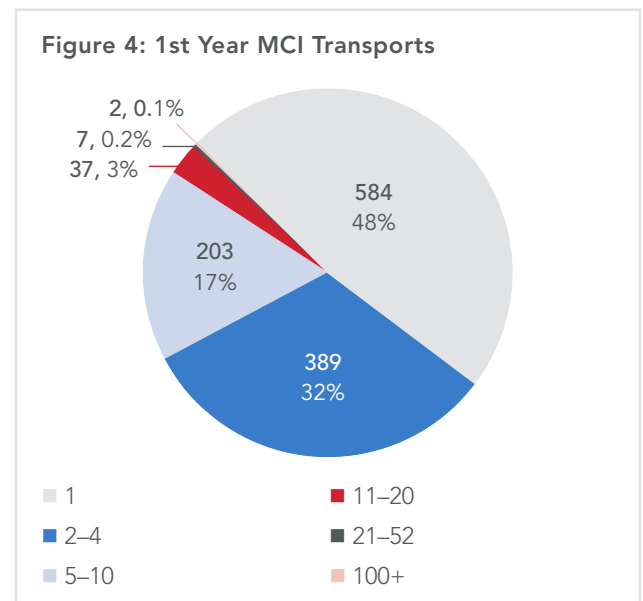
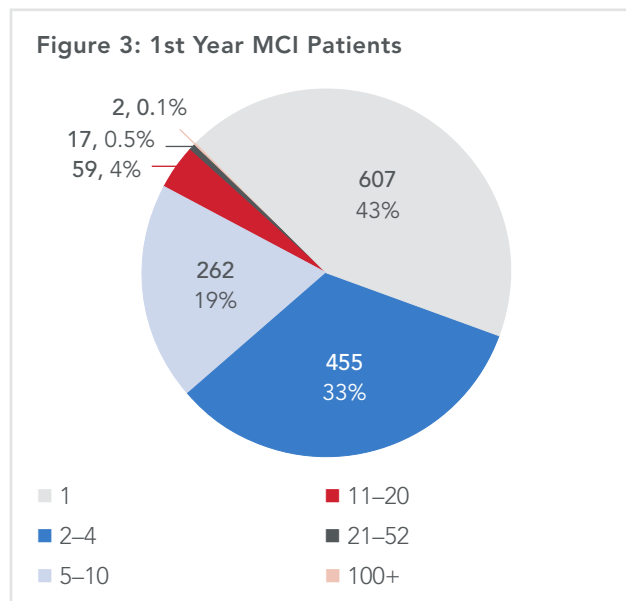
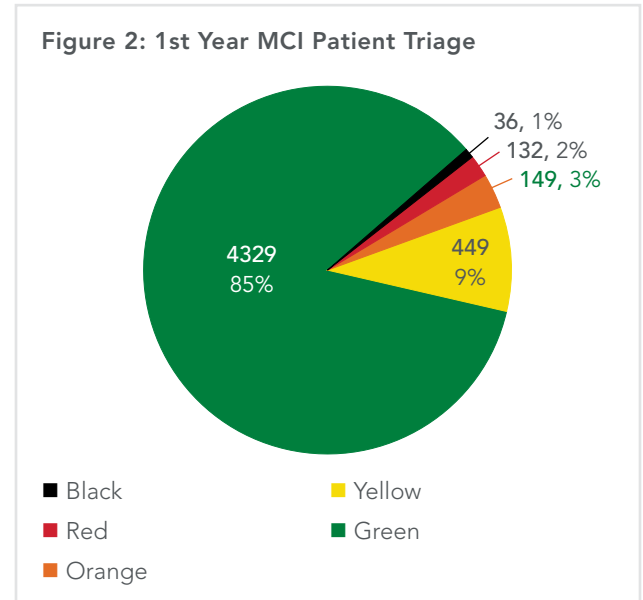
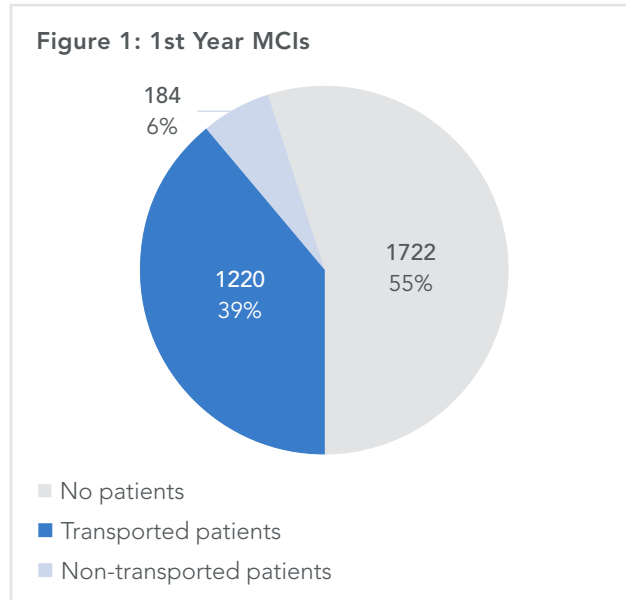
FDNY staff conducted analyses of MCIs from August 1, 2016, through July 31, 2017, the first year the new communication protocols were implemented. Because of how the data is coded within FDNY's data systems, analyses were limited to MCI Computer Aided Dispatch information. Notification data was not included. FDNY has since implemented a hospital notification tracking system that will enable additional analyses in the future.

In the first year of implementation, 3,124 MCIs were declared by FDNY, all of which were Level A or Level B. The MCIs resulted in 5,137 patients, for an average of 1.7 patients per MCI. However, less than half (45%) of all MCIs resulted in patients, and only 39% resulted in patients being transported to a hospital (see [FIGURE 1](#)).

Of the MCI patients, nearly all (94%) were non-critical, meaning green or yellow tagged. Only 5% were critical, meaning red or orange tagged. The remaining 1% were black tagged (meaning deceased) and were not transported to the hospital (see [FIGURE 2](#)).

Of the MCIs that produced patients (n=1,402), 33% produced two to four patients, while 43% produced just one patient. Only 19 incidents produced more than 20 patients, accounting for 0.6% of all MCIs for the year (see FIGURE 3).

Of the MCIs resulting in patients being transported to a hospital (n=1,220), 32% resulted in two to four patients being transported, with nearly half (48%) resulting in just one patient transport (see FIGURE 4).



WHAT THE FINDINGS MEAN FOR NEW YORK CITY 911-RECEIVING HOSPITALS

Given these findings, New York City 911-receiving hospitals may consider adjusting their protocols for a Level A notification call, given the likelihood that the call will result in no patients or a small number of non-critical patients being sent to the emergency department via EMS transport. Hospitals, therefore, may choose a posture of enhanced monitoring rather than activation upon receipt of a Level A call.

Enhanced monitoring enables a hospital to quickly pivot when critical patients are received, or if the incident escalates. Hospital personnel must also use their judgment based on the information provided during the MCI notification call, which should include types of patients and the nature of the incident, if known. Hospital staff should also consider whether additional patients are likely to arrive on their own.

Many New York City hospitals anticipate that the response to a Level A notification can be managed with available emergency department resources. Level B or higher incidents will likely require staff and resources in addition to the ED. As a result, hospitals should consider creating mass notification protocols that trigger specific actions by key departments for Level B, C, and D notifications.

FDNY MCI Coding Adjustments

Based on FDNY analyses and discussion with GNYHA and hospital representatives, FDNY removed two codes—MCI 10-29 for a suspicious package and MCI 10-43 for barricaded individuals—from the MCI hospital notification criteria. The analyses revealed that the 10-29 code resulted in only one patient transport during the entire first year. While the 10-43 code was used frequently (n=266), and often produced a transport (n=221), 88% produced only one transport, and 10% produced only two transports. The removal of the two codes should decrease the overall number of MCI notifications, resulting in increased specificity.

Future Actions

- A workgroup led by FDNY and GNYHA developed the recommendations for the pre-hospital-to-hospital protocol that were implemented in August 2016.
- The workgroup continues to meet to monitor implementation and recommend adjustments for FDNY and participating hospitals.
- Analyses of Year 2 implementation (August 2017-July 2018) will be presented to the workgroup and will inform additional actions and activities.



A PDF of this booklet is available for download at:

<https://www.gnyha.org/tool/pre-hospital-to-hospital-communication-protocols-for-mcis/>

APPENDIX G: IMPROVING SITUATIONAL AWARENESS WITH “PENMAN”

Reviewing the response to one of the deadliest shootings in US history on October 1, 2017, hospitals in Las Vegas reported that their Hospital Incident Command Systems (HICS) needed more time to get organized than expected. To help increase situational awareness for HICS staff responding to an unfolding MCI, the Nevada Hospital Association (NHA) and its partners are encouraging the use of the mnemonic PENMAN.

PENMAN was created more than 30 years ago by Crafton Hills College’s Paramedic School in California to help students learn how to be safe and protect others while responding to an incident. GNYHA thanks the NHA for sharing this information and allowing its inclusion in this toolkit.

PENMAN INCLUDES

P for Personal Safety and Personnel Safety

This reminds incident commanders that their first priority is to keep patients, visitors, and staff safe, and to take steps accordingly, such as dispatching security staff to shut down entrances.

E is for Environment

This concerns the need to quickly evaluate the hospital’s environment: is there damage to the facility, contamination, or disruptions in service such as electricity or the Internet? The NHA also recommends that hospitals look at the environment in terms of the staff and visitors’ mood. A waiting area crowded with sad or stunned visitors and patients has different needs than one filled with angry or hostile visitors and patients. As the NHA notes, “Unanticipated changes to the hospital’s environment of care would be a service disrupter that command staff must immediately identify; this is why it’s the second most important priority.”

N is for Number

This refers to the number of victims and quickly arriving patients during an MCI. A number range—not a specific figure—will help incident commanders make the necessary preparations.

M is for Mechanism

This prompts clinicians to think about the types of injuries to anticipate from the MCI, and to make preparations to treat them. Burns from a fire require different supplies and specialists than gunshot injuries.

A is for Additional Resources

What else is needed—more staff to address the number of patients? Specialized supplies to meet the mechanism of injury? This helps incident commanders articulate what exactly is needed.

N is for Need to Evacuate

Is the MCI an event that requires the hospital to evacuate? Incident commanders should evaluate this question early in the response.

APPENDIX H: 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, GenHosp2, GenHosp3
First Name	<ul style="list-style-type: none"> • Each hospital has been assigned an item. Hospitals are encouraged to develop additional names within their assigned item type beyond those provided. • Example: Assigned Item = Flowers • Name list: Begonia, Daffodil, Lily, Rose, Lilac, Dahlia, etc.
Estimated Age	1/1/estimated year of birth (based on hospital staff observation)
Gender	Indicate "male," "female," or "unknown"

Additional Variables	Naming Convention
If the Patient is a Minor	Indicate in the medical record whether the patient arrived unaccompanied or was brought in by or with someone. If brought in by someone, capture the individual's contact information.
Identifying Physical Features	Ensure there is a place on registration documentation and within the electronic medical record (EMR) to capture information about tattoos, unusual features or markings, and their location, which could help with identification.
Accompanying Items	List any items that the person may have had with them upon arrival that could aid identification; if possible, take a photograph of these items and include it with the medical record. Include "in case of emergency" information obtained from the individual's cellphone.
Photo	Take a picture of each patient and upload it to the EMR, as time allows.

Additional Variables	Naming Convention
Disaster Tag	<ul style="list-style-type: none"> Associate all patients related to the incident, whether identified or unidentified, with an electronic disaster tag. Because the nature of the incident may not be known, a suggested convention for the disaster tag is: MCI_m/d/y_closest hour to the arrival of the first patient. A government entity may later instruct hospitals to retroactively apply a different incident tag such as "Pulse Nightclub Incident."
Reconciled Last Name, First Name	Ensure there is a place within the medical record to indicate the individual's first and last names once he/she is identified. Also, allow space for commonly used nicknames. Both the medical record and identification bracelet should be updated as soon as the patient is identified, with both names visible. This is necessary to ensure labs, radiography, and other clinical care elements associated either with the assigned name or reconciled name are available under a single patient record.

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.
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A PDF of the full naming convention document, including suggested first and last names for all GNYHA member hospitals is available for download at:

<https://www.gnyha.org/tool/hospital-abbreviations-and-items-in-support-of-regional-unidentified-patient-naming-convention/>

APPENDIX I:

HOSPITAL COORDINATION WITH LAW ENFORCEMENT

This document addresses coordination between law enforcement/investigative agencies and hospitals before, during and following emergencies. While the main focus is on response to events or incidents happening outside of the hospital setting, the document also discusses internal practices, such as security, when working with law enforcement or investigative agencies. It also offers guidance on ongoing communication with local law enforcement and recommended actions for specific events. The document is the product of a series of conversations with representatives from the New York City Police Department (NYPD). While this document specifically addresses coordination with NYPD, many of the principles are relevant outside New York City. Non-New York City members are encouraged to discuss coordination with their local law enforcement agencies.

One of the most important preparedness actions a hospital can take is to form and maintain a strong working relationship with its local police precinct. Officers from the local precinct should be familiar with the layout of the facility and its emergency operations procedures. The precinct should also be aware of pre-event site visits to the facility. NYPD and other law enforcement agencies recognize that lifesaving efforts by hospital staff always take precedent over investigative activities. Through regular meetings and joint exercises, law enforcement officers and hospital staff can better understand one another's roles during an event. Through collaboration, they can develop protocols to allow law enforcement to respond efficiently and effectively, while ensuring the safety of patients and staff.

SECURITY CONSIDERATIONS

Identifying a Law Enforcement Officer

All law enforcement officers must provide proper identification when requested by hospital personnel. Staff should be trained to always request to see identification and never assume that a uniform alone is appropriate identification. NYPD does not expect hospital personnel or administrators to be able to validate law enforcement identification; if hospital personnel are unfamiliar with identification provided by a law enforcement or an investigative agent, or if the officer or agent refuses to provide proper identification, the local precinct should be contacted immediately. All NYPD officers have resources to validate law enforcement and investigative agency identification.

Patients Under Arrest

If a person receiving treatment at your facility is under arrest, that person will always be accompanied by at least one law enforcement officer. If the clinical professionals treating the patient request the removal of handcuffs, the officer must call a supervisor for approval before removing the handcuffs—standard operating procedure to prevent prisoner escape.

Large-Scale Incidents

In a large, multi-site event such as the 2015 Paris attacks, a hospital may not be able to rely on local law enforcement to secure its facility. To prepare for such events, hospitals are encouraged to work with their local precinct to develop an enhanced security plan. The plan may include:

- Lockdown procedures and access limitations
- Perimeter security and street closures (initiated and maintained by your facility)
- Hospital Incident Command System (HICS) procedures used by the health care facility, and how HICS will interface with law enforcement

INTERFACING WITH LAW ENFORCEMENT

NYPD's Coordination Function

If an event results in a large law enforcement presence at your facility, NYPD will assign a lead detective to your facility who will serve as a single point of contact (liaison) for all responding law enforcement and investigative agencies. The lead detective will coordinate the actions of all law enforcement and investigative personnel, regardless of jurisdiction. The lead detective, in coordination with the designated Hospital Liaison (see below), will assign a single investigator or a multi-agency team of investigators to speak with potential victims and witnesses to ensure minimal disruption to patient care. Use of liaison officers by NYPD and the hospital provides a clean interface between HICS and the National Incident Management System (NIMS) Incident Command System (ICS) used by outside agencies.

To successfully coordinate with responding agencies, NYPD requests that facilities:

Designate a Debriefing Room

Designate a specific physical location (Debriefing Room) inside, or in close proximity to, the Emergency Department where investigative personnel from various agencies can convene.

Assign Security Personnel to Entrances

Assign security personnel to all entrances and instruct them to actively engage with and guide incoming investigative personnel to the Debriefing Room.

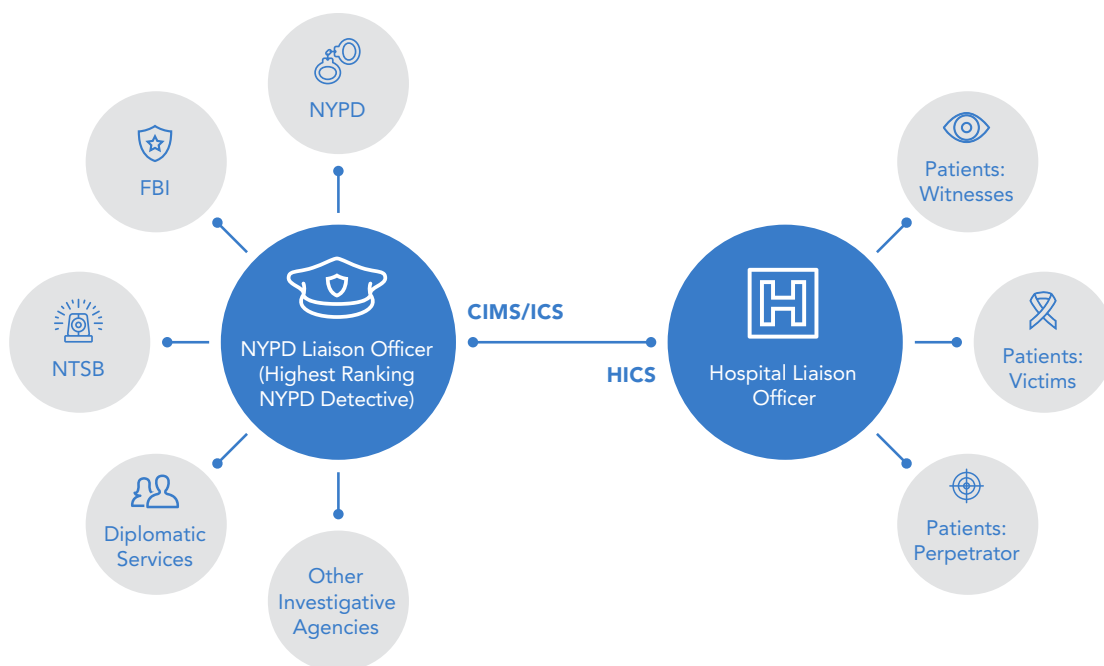
Appoint a Hospital Liaison

Appoint a Hospital Liaison who will serve as the single point of contact for the lead detective.

- Your liaison should remain in or near the Debriefing Room
- Your liaison should be familiar with the HICS and NIMS ICS structures
- Your liaison will serve as a single point of contact for the NYPD lead detective and should have the ability and resources to connect law enforcement with potential witnesses and victims

SUGGESTED PRACTICES FOR SPECIFIC EVENTS

Below are suggestions on how to manage the interface with law enforcement and investigative agencies that would likely occur due to no-notice events, high-profile events, or pre-event site visits.



No-Notice Events

No-notice events such as acts of terror, explosions, or large motor vehicle accidents may result in a medical surge to your facility, as well as the presence of scores of law enforcement and investigative personnel.

- Designate a Debriefing Room, assign security personnel to entrances, and appoint a Hospital Liaison (see [PAGE 98](#)).
- Consider having a team of hospital personnel in the Debriefing Room to help your Hospital Liaison guide investigative officials to interviewees.
- Depending on the nature of the event, expect multiple investigative agencies to respond to your facility, including but not limited to:

NYPD	Other Law Enforcement and Investigative Agencies
Emergency Service Unit (ESU)	New York State Police
Critical Response Command (CRC)	Federal Bureau of Investigation (FBI)
Strategic Response Group (SRG)	US Department of State—Diplomatic Security Service
Joint FBI Task Force	National Transportation Safety Board (NTSB)
Missing Persons	United States Marshals Service
Detective Bureau	United States Park Police
Bomb Squad	New York City Sheriff
Arson/Explosion Unit	MTA Police
Borough Command	Amtrak Police

Injured Member of Service (Police, Fire, EMS) or Other High-Profile Patient

When caring for an injured member of service or high-profile individual, the facility should consider these suggested practices:

- Alert the Public Information Officer (PIO) or External Communications Staff immediately. *Your PIO will need to activate protocols for managing members of the media at the facility and prepare for potential press conferences.*
- Designate a Debriefing Room, assign security personnel to entrances, and appoint a Hospital Liaison.
- Designate a secondary physical location where concerned colleagues, family members, friends, or dignitaries can gather in support of the injured person(s).

Pre-Event Site Visits

Occasionally, law enforcement officials may perform pre-event site visits. Such visits typically involve a walk-through of the hospital and brief meetings with key staff to understand clinical capabilities and security protocols. Such visits are typically reserved for high-profile events or visits from dignitaries. For planned events requiring pre-event site visits, NYPD should be aware of and may accompany Federal, State, or local agencies conducting the visits. Contact your local NYPD precinct immediately if:

- Staff is unable to verify the identification provided by a person claiming to be a Police Officer, Federal Agent, or Investigative Personnel that presents at your facility.
- A person claiming to be a Police Officer, Federal Agent, or Investigative Personnel is in uniform but refuses to provide identification to hospital staff.
- A person claiming to be a Police Officer, Federal Agent, or Investigative Personnel presents to your facility for any type of pre-event site visit without an NYPD representative.



A PDF of this guidance document is available for download at:

<https://www.gnyha.org/tool/hospital-coordination-with-law-enforcement-guidance-document/>

APPENDIX J: DEVELOPING FAMILY REUNIFICATION PLANS AND CENTERS

The following documents provide guidance for developing and implementing family reunification plans and establishing family support centers in times of disaster.

ASPR TRACIE No-Notice Incidents Tip Sheet: Family Assistance

<https://asprtracie.s3.amazonaws.com/documents/no-notice-incident-family-assistance.pdf>

Brief primer on what to expect, how to prepare, and what to do when managing concerned family and friends who arrive at or contact the hospital.

Los Angeles County Family Information Center Planning Guide for Healthcare Entities

http://www.calhospitalprepare.org/sites/main/files/file-attachments/fic_planning_guide_final_062813_v62_0.pdf

Comprehensive guidance on developing, activating, maintaining, and deactivating family information centers at hospitals and other health care facilities, including checklists, sample paperwork, and site diagrams.

Western Region Homeland Security Advisory Council: Family Reunification Plan Template

http://wrhsac.org/wp-content/uploads/2017/10/Family-Reunification-Plan-Template_FINAL_8-31-17_incl.-appendices-pages-all-portrait.pdf

Guidance for developing and activating family reunification plans for institutions that provide services to children; protocol templates and checklists can be customized for hospitals.

Orlando Health Foreign National White Paper

<https://www.orlandohealth.com/campaigns/orlando-health-foreign-national-white-paper>

Guidance on managing patients who are not residents or citizens of the United States, including contacting foreign officials and family members; based on the organizational response to the June 2016 Pulse Nightclub shooting.

FAMILY REUNIFICATION SYSTEMS AND RESOURCES

The following list includes regional and national systems for family reunification and patient registration. As part of the response planning process, hospitals and health systems should know which systems will be used in their jurisdiction and align facility plans accordingly.

FEMA National Emergency Family Registry and Locator System

<https://egateway.fema.gov/inter/nefrls/home.htm>

When activated by FEMA, this secure online platform allows disaster survivors to register their location and leave messages, and allows family and friends to search for loved ones.

American Red Cross: Safe and Well

<https://safeandwell.communityos.org/cms/index.php>

This web system allows patients and victims to register themselves as “Safe and Well” and allows family and friends to search the registry for loved ones.

National Center for Missing and Exploited Children: Unaccompanied Minors Registry

<https://umr.missingkids.org/umr/reportUMR?execution=e1s1>

This online portal allows hospital and agency staff to report unaccompanied minors in their care during times of disaster. Reports are immediately sent to law enforcement field workers and are also open to the public.

Google Person Finder

<https://google.org/personfinder/global>

When activated by the Google Crisis Response team, this publicly available web application allows hospitals and agencies to upload victim data, and also accepts data from other registries in a common format. Families, friends, and aid workers can search this aggregated database to connect with victims and loved ones.

APPENDIX K: PRIVACY LAW AND THE SHARING OF MEDICAL INFORMATION DURING EMERGENCIES

Questions often arise about the sharing of patient information and the applicability of Health Insurance Portability and Accountability Act (HIPAA) regulations during emergencies. HIPAA applies to covered entities such as hospitals, nursing homes, physician practices, and managed care companies. [Hospitals are permitted to share protected health information \(PHI\) for the purposes of treatment, notification, and in the interest of public safety, within certain bounds, which are discussed below.](#) Sharing of PHI is regulated by the U.S. Department of Health and Human Services (HHS). To the extent that New York State laws also govern such sharing, the New York State Department of Health (DOH), Office of Mental Health, and Office of Alcohol and Substance Abuse Services also may exercise regulatory oversight. This document details what PHI can be shared and with whom during specific types of emergency incidents, including:

- Mass casualty events
- Large-scale patient evacuations
- Disease outbreaks

This document draws upon guidance produced by the HHS Office for Civil Rights (OCR) in the wake of Hurricane Katrina (September 2005 OCR Bulletin), and updated guidance released during the 2014 West Africa Ebola Outbreak (November 2014 OCR Bulletin). While the document does not specifically address state laws, there is significant alignment between HIPAA and New York State law on the sharing of PHI in the above scenarios. For questions about how HIPAA interacts with state law, hospital attorneys should be consulted.

MASS CASUALTY EVENTS

If a hospital receives a large number of victims from a mass casualty event, certain privacy disclosure issues must be considered. The following provisions are existing HIPAA exceptions that allow for disclosure; no emergency declaration or waiving of enforcement is needed.

[Public Health Authority or Private Disaster Relief Entities \(e.g., the American Red Cross\)](#)

In the event of an emergency, a hospital may use or disclose PHI to such entities in order to notify or assist in the notification of a health care agent (proxy), family member, or other personal representative regarding the patient's location, condition, or death. This could include providing information to a local health department to aid family reunification. A hospital may also disclose information to a foreign government agency (e.g., through an embassy) at the direction of the public health authority, if the foreign government agency is acting in collaboration with the public health authority.

[Disclosures to Identify, Locate, and Notify Family Members, and Those Responsible for Care](#)

A hospital may share relevant information about a patient with family members, guardians, personal representatives such as a health care proxy, or anyone else responsible for the patient's care.

A hospital also may share information about a patient as necessary to identify, locate, and notify such individuals about a patient's location, general condition, or death. HHS has indicated that disclosure to police, the press, or the public at large, if necessary, would also be permissible for this purpose.

When possible, the hospital should obtain oral permission from patients. If the patient is unable to provide permission, hospital personnel may make the disclosure anyway, if in their professional judgment disclosure of this information is in the patient's best interests.

Disclosures to Law Enforcement to Help Identify or Locate a Missing Person

If law enforcement requests information to help identify or locate a missing person, a hospital may disclose the following limited information: 1) name and address, 2) date and place of birth, 3) Social Security number, 4) ABO blood type and rh factor, 5) type of injury, 6) date and time of treatment, 7) date and time of death, and 8) a description of distinguishing physical characteristics. Information related to the individual's DNA, dental records, body fluid or tissue typing, samples, or analysis cannot be disclosed under this provision, but may be disclosed in response to a court order, warrant, or written administrative request.

Disclosures to the Press

Upon request for information about a particular patient by name, a hospital may release limited PHI contained in a facility directory (e.g., patient location in the facility) and his/her general condition. For more information about directory information, please refer to Page 6 of GNYHA's *Revisiting HIPAA* booklet. The hospital must have given the patient the right to opt out of the directory (this is usually provided in a hospital's Notice of Privacy Practices.) If the patient is unable to exercise the opt-out right, hospital personnel still may make the disclosure, if in their professional judgment it is in the best interests of the patient.

LARGE-SCALE PATIENT EVACUATIONS

Due to natural or man-made events, it may become necessary to evacuate large numbers of patients from one health care facility to another. Under an evacuation scenario, hospitals may disclose PHI, without a patient's authorization, as necessary to treat the patient. Treatment includes the coordination or management of health care and the referral of patients for treatment. This provision allows the sharing of PHI between evacuating and receiving facility providers, as well as members of their workforce, including personnel responsible for patient transport. Disclosures made for treatment purposes are not subject to HIPAA's "minimum necessary" rule (see below). No emergency declaration or waiving of enforcement is needed.

New York State law allows sharing of PHI in such circumstances. Hospitals, nursing homes, adult care facilities, and State-run facilities are required to use New York's Evacuation of Facilities in Disaster Systems, known as eFINDS, to track patients during evacuations. This bracelet system enables DOH to monitor the movement of patients and residents between evacuating and receiving facilities. Such disclosures are allowable under HIPAA.

Many hospitals have existing transfer agreements with a small number of hospitals or other health care facilities to which they frequently transfer patients. These agreements often outline what types of PHI can be shared, under what circumstances, and by whom. Hospitals are encouraged to review transfer agreements to ensure that the sharing of PHI for treatment purposes is well defined. Transfer agreements can be useful for setting in advance each facility's expectations and understanding around information sharing.

COMMUNICABLE DISEASE OUTBREAKS

In addition to the above disclosure issues, there are further considerations during communicable disease outbreaks:

- A hospital, may disclose PHI to a person who is at risk of contracting or spreading a disease or condition if state law authorizes the hospital to notify such individuals as necessary to carry out public health interventions or investigations.
- Under New York State law, a physician treating a person with a highly communicable disease may advise members of the person's household about precautions to be taken to prevent further spread of the disease, and appropriate specific preventive measures.
- Hospitals are also obligated to disclose to the appropriate public health authorities that the institution is treating a patient suspected or confirmed to have the disease of concern, and then work with the public health authorities to support contact tracing and notification activities.

These disclosures can be made without patient authorization.

The Role of Regulatory Waivers

During significant emergencies, the HHS Secretary and DOH can waive enforcement of certain provisions of HIPAA and other privacy laws. For HHS to waive enforcement, the President must declare an emergency and the HHS Secretary must declare a public health emergency. Hospital counsel and regulatory staff, along with GNYHA, generally will monitor such declarations and actions.

It is important to note, however, that no such waiving of enforcement is needed for hospitals to share PHI for the purposes detailed above, as long as such sharing does not violate state laws.

Minimum Necessary Disclosures and Safeguarding of PHI

While disclosure of PHI is allowable to certain entities during emergency incidents, hospitals must make reasonable efforts to limit the information disclosed to the "minimum necessary" to accomplish the disclosure's purpose, and must continue to implement reasonable safeguards to protect PHI against intentional or unintentional uses and disclosures.

ADDITIONAL RESOURCES

- November 2014, US Department of Health and Human Services (HHS), Office for Civil Rights Bulletin: HIPAA Privacy in Emergency Situations. <https://www.hhs.gov/sites/default/files/ocr/privacy/hipaa/understanding/special/emergency/hipaa-privacy-emergency-situations.pdf>
- September 2, 2005, US Department of Health and Human Services Office for Civil Rights Hurricane Katrina Bulletin: HIPAA Privacy and Disclosures in Emergency Situations. <https://www.hhs.gov/sites/default/files/ocr/privacy/hipaa/understanding/special/emergency/katrinahipaa.pdf>
- Frequently Asked Questions: Is the HIPAA Privacy Rule suspended during a national or public health emergency? <https://www.hhs.gov/hipaa/for-professionals/faq/1068/is-hipaa-suspended-during-a-national-or-public-health-emergency/index.html>
- 2016, GNYHA, *Revisiting HIPAA: A Guide to the Health Insurance Portability and Accountability Act*. <https://www.gnyha.org/tool/revisiting-hipaa-a-guide-to-the-health-insurance-portability-and-accountability-act/>

- New York Codes, Rules and Regulations, Title 10. Department of Health, Chapter 1. State Sanitary Code, Part 2. Communicable Diseases Isolation, Quarantine and Restriction. <https://www.phasys.pitt.edu/SearchResults.aspx?type=solution&ArticleID=fff44b7f-b80a-4260-8648-07882fb08bec&displaycount=100000&displaystart=0&keyword=&operator=or&citation=10%20NYCRR%202.27>
- HHS, Disclosures for Emergency Preparedness – A Decision Tool: Overview. <https://www.hhs.gov/hipaa/for-professionals/special-topics/emergency-preparedness/decision-tool-overview/index.html>

APPENDIX L: SCENARIOS TO SUPPORT EXERCISES

The following scenarios are intended to support unit, facility, or system-wide exercises. The Levels A, B, and C correspond to New York City protocols implemented in 2016 and described on [PAGE 12](#). Levels increase in severity from A, an incident likely to yield a few casualties, to C, a large-scale, dynamic incident likely to yield a large number of casualties. While the levels correspond to a New York City protocol, the scenarios are general and can be useful to hospitals in other jurisdictions. While each scenario includes information about emergency medical service (EMS) transports, it is important for hospitals to anticipate self-evacuating patients.

Level A MCI Scenarios

- College Dorm Fire
- Car Crash at Daycare Center

Level B MCI Scenarios

- Bus Accident
- Office Building Explosion

Level C MCI Scenarios

- Park Concert Shooting
- Nightclub Explosion

LEVEL A MCI SCENARIOS

Scenario 1: College Dorm Fire

At 6:45 p.m. on Wednesday evening, 911 receives a call about a fire in a college dorm in close proximity to the hospital. The dorm is a large building with approximately 20 floors and buildings on either side. The fire began in an apartment on the building's 12th floor.

By 6:50 p.m., fire, EMS, and police are arriving on the scene. Students are evacuating the building via the emergency exits. The fire has grown, but has not spread to either of the adjacent buildings.

By 6:55 p.m., the fire department has entered the building and has begun suppression and search and rescue activities. EMS units are treating some residents on the street as they exit the building.

By 7:00 p.m., EMS notifies two hospitals in the area per established protocol. Each hospital's ED receives a notification that a Level A MCI has occurred nearby.

Anticipated injuries: burns, respiratory impact

Scenario 2: Car Crash at Daycare Center

At 11:00 a.m. on Tuesday morning, 911 receives a call about a motor vehicle crashing into a daycare center near the hospital. At the time of the crash, staff members and approximately 25 children from the ages of five months to 24 months are inside the building.

By 11:05 a.m., fire, EMS, and police are arriving on the scene. Daycare staff and bystanders have started bringing children out of the center. Fire and police personnel assist with this task.

By 11:10 a.m., EMS units are triaging and treating patients on the street as they exit the building.

By 11:15 a.m., EMS notifies two hospitals in the area per established protocol. Each hospital's ED receives a notification indicating a Level A MCI has occurred nearby. The nature of the incident is a motor vehicle accident with pediatric and adult victims.

Anticipated injuries: blunt/penetrating trauma, burns, minor injuries

LEVEL B MCI SCENARIOS

Scenario 1: Bus Accident

At 5:35 p.m. on Friday of a holiday weekend, 911 receives multiple calls about a vehicular accident on a nearby roadway. During the holiday weekend rush hour, a bus crashed into the back of a tractor trailer, resulting in a four-vehicle pileup, consisting of the bus, tractor trailer, and two other cars. The bus's front windshield shattered on impact.

By 5:50 p.m., fire, EMS, and police begin arriving on the scene. Passengers of the vehicles involved in the crash have begun evacuating. A number of other vehicles have stopped, and drivers have tried to help those involved in the accident.

By 5:55 p.m., fire and EMS have begun searching the vehicles for any additional passengers. EMS units are triaging and treating patients on the street.

By 6:00 p.m., EMS notifies three nearby hospitals per established protocol. Each hospital's ED receives a notification that a Level B MCI has occurred near the hospital. The nature of the incident is a motor vehicle accident.

Anticipated injuries: blunt/penetrating trauma, burns, minor injuries

Scenario 2: Explosion at Office Building

At 8:00 a.m. on a Thursday, 911 receives multiple calls about an explosion at a small commercial building near the hospital. The five-story building houses multiple businesses.

By 8:05 a.m., fire, EMS, and police are arriving on the scene. The building is being evacuated. Many employees are going to the meeting locations their organizations have established in the event of an emergency so a number of patients have left the scene.

By 8:10 a.m., EMS units are triaging and treating patients on the street as they continue to exit the building and head to their meeting locations. FDNY personnel have begun assessing the stability of the remaining structure and are starting search and rescue activities. Because it is early in the day, the number of employees that had already arrived at the building is unknown.

By 8:15 a.m., EMS begins notifying three nearby hospitals per established protocol. Each hospital's ED receives a notification that a Level B MCI has occurred nearby.

Anticipated injuries: blunt/penetrating trauma, burns, respiratory impact, minor injuries

LEVEL C MCI SCENARIOS

Scenario 1: Park Concert Shooting

At 7:30 p.m. on a Friday evening, 911 receives several calls about a shooter in a nearby park during a summer concert. About 300-400 people are believed to be at the concert, including children and teens. 911 continues to receive multiple calls about injured people. Many are injured and trampled in the process of fleeing the park.

By 7:35 p.m., fire, EMS, and police are arriving on the scene. However, they do not have the shooter's exact location. Fire and police set up their command posts.

By 7:40 p.m., EMS units are treating some patients who are outside the park, but have not yet been able to enter the park area itself to retrieve victims.

By 7:45 p.m., based on the number of anticipated victims, EMS notifies five area hospitals per established protocol. Each hospital ED receives a notification that a Level C MCI has occurred nearby. The nature of the incident is an active shooter, and both adult and pediatric victims are expected.

Anticipated injuries: blunt/penetrating trauma, crushing, minor injuries

Scenario 2: Explosion at a Nightclub

At 2:00 a.m. on a Sunday, 911 receives several calls in rapid succession about an explosion at a nightclub in proximity to the hospital. It is a large, popular nightclub with apartment buildings on either side. Routinely, about 1,000 people visit the nightclub on weekend nights. 911 continues to receive multiple calls for patients injured.

By 2:05 a.m., fire, EMS, and police are arriving on scene. A second explosion occurs inside the nightclub. The main entranceway is packed with patrons trying to escape, with many trampled in the process. The second explosion seems to also impact one of the adjacent apartment buildings.

By 2:10 a.m., EMS units are treating approximately 50 patients on the street.

By 2:15 a.m., based on the number of anticipated victims, EMS begins notifying five area hospitals per established protocol. The hospital ED receives a notification that a Level C MCI has occurred near the hospital. The nature of the incident is an explosion, and there are both adult and pediatric victims.

Anticipated injuries: blunt/penetrating trauma, burns, crushing respiratory impact



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