



Operation Jesse

Joint Evacuation & Simulated Surge Exercise
After Action Report – Improvement Plan

FINAL

Health Care Association of New Jersey
Arcadia Nursing and Rehabilitation Center
Hamilton Continuing Care Center

Exercise Date - May 18 - 19, 2011
Final Report Date - June 17, 2011

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EXECUTIVE SUMMARY

Recent extreme weather related events, including the violent and deadly tornado that directly impacted health care facilities in Joplin, Missouri, emphasize the need for continued emergency preparedness within New Jersey's long term care facilities. The need for properly trained healthcare workers to respond to natural disasters that may either directly or indirectly impact their community is critical, not only to ensure the safety of their residents, but also to help reduce the impact and the potential for unnecessary patient surge into other areas of the healthcare continuum including acute care hospitals, who depending on the scope of the emergency within a community, may also be overwhelmed with their own patient surge.

The evacuation and/or medical surge of a long term care facility does not happen often and thus, healthcare workers with long term care facilities must train and exercise these capabilities to enhance their overall ability to respond to such an emergency. Currently, long term care facilities are required to conduct at least one evacuation drill each year, but there are no such requirements to exercise medical surge.

Operation JESSE (Joint Evacuation & Simulated Surge Exercise) was conducted in order to evaluate the ability of long term care facilities to conduct a partial evacuation, prepare for and receive a medical surge of new residents. This exercise was conducted utilizing human patient simulators that permitted nursing staff to use their clinical assessment skills, apply professional proficiency, and draw on their communication skills during the emergency response. Additionally, the Operation Jesse exercise was designed to establish a learning environment for players to exercise emergency response plans, policies, and procedures as they pertain to an emergency event.

The Operation JESSE exercise was developed to examine the capabilities of Arcadia Nursing & Rehabilitation Center (Arcadia) and Hamilton Continuing Care Center (HCCC). Operation JESSE was created to exercise the following capabilities: Onsite Incident Management, Communications, Shelter-in-Place/Citizen (Resident) Evacuation and Medical Surge. The Health Care Association of New Jersey (HCANJ) sponsored this exercise and their Director of Emergency Preparedness assembled the exercise planning team consisting of long term care facility representatives and experts from the Center for Public Health Preparedness.

Based on the exercise planning team's deliberations, the following objectives were developed for Operation JESSE:

- **Objective 1:** Evaluate the ability to safely and efficiently evacuate residents from a long term care facility. Arcadia Nursing and Rehabilitation Center staff were expected to establish an internal command and control structure in response to an internal emergency event, communicate effectively, ensure that the medical needs and safety of their residents were met at all times (continuity of care), ensure site security, establish a triage area for coordination of the evacuation of residents, and ensure that resident records and medicines were transported properly.
- **Objective 2:** Evaluate the ability to safely and efficiently medically surge a long term care facility. Hamilton Continuing Care Center staff were expected to establish an internal command and control structure in response to an external emergency event,

communicate effectively (including a media component), ensure that the medical needs and safety of residents are met at all times, ensure site security, establish a triage/patient care area for receiving the medical surge of new residents, and ensure that resident records and medicines were received and processed properly from the evacuating facility.

The purpose of this report is to analyze exercise results, identify strengths to be maintained and built upon, identify potential areas for further improvement, and support development of corrective actions.

Major Strengths

The major strengths identified during this exercise are as follows:

- The Nursing Home Incident Command System (NHICS) adapted from the Incident Command System (ICS) was utilized and universally embraced by employees of both LTC facilities.
- The use of the **Resident Evacuation Document** envelopes, developed by the American Health Care Association (AHCA), provided an effective and easily recognizable means of transporting resident medical records and essential medicines.
- “Decisional Space” - Early reorganization of the need to evacuate, call upon pre-established Memorandums of Understanding/ Memorandums of Agreement (MOUs/MOAs), and the communication of evacuation needs to the receiving facility allowed for sufficient preparation time for receiving of new residents into the triage area.

Primary Areas for Improvement

Throughout the exercise, several opportunities for improvement in both Arcadia and HCCC’s ability to respond to the incident were identified. The primary areas for improvement, including recommendations, are as follows:

- Both facility administrators did not designate an Incident Command Post and were too involved in the operationalization of both evacuation and surge activities.
- The lack of an effective Command and Control structure within the triage areas created confusion and hindered accurate resident/patient tracking.
- Basic clinical interventions within the triage area of both player facilities were not identified, were delayed or were not appropriate given the illnesses/injuries presented by the various “resident/patient” simulators.

SECTION 1: EXERCISE OVERVIEW

Exercise Details

Exercise Name

Operation JESSE (Joint Evacuation & Simulated Surge Exercise)

Type of Exercise

Full Scale Exercise

Exercise Start Date

May 18, 2011 (via HCANJ's Amerilert System)

Exercise End Date

May 19, 2011

Duration

1 Day

Location

Evacuation of Arcadia Nursing & Rehabilitation Center

Medical surge of Hamilton Continuing Care Center

Sponsor

Health Care Association of New Jersey (HCANJ)

Program

NJDHSS 2011 Healthcare Association Emergency Preparedness Grant Program

Mission

NIMS Compliance, Education and Preparedness Training, Exercise, Evaluation and Corrective Actions, Needs of At-Risk Populations, Interoperable Communication, Medical Evacuation

Capabilities

Onsite Incident Management, Communications, Shelter-in-Place/Citizen (Resident) Evacuation and Medical Surge.

Scenario Type

Natural Disaster – Initial NWS Tornado Watch, subsequent straight line winds topple large tree onto facility resulting in structural damage and water leakage.

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Participating Organizations

Health Care Association of New Jersey, Arcadia Nursing & Rehabilitation Center, Hamilton Continuing Care Center, Home Care Association of New Jersey, NJ Primary Care Association, Robert Wood Johnson University Hospital – Hamilton, Robert Wood Johnson University Hospital Emergency Medical Services, Nottingham Fire Department, BCC Center for Public Health Preparedness, Central West Medical Coordination Center, Hospicom

Number of Participants

- Players – Fifty Five (55)
- Controllers – Seven (7)
- Evaluators – Four (4)
- Observers – Seven (7)
- Victim Role Players – Human Patient Simulators – Eight (8)

SECTION 2: EXERCISE DESIGN SUMMARY

Exercise Purpose and Design

Operation JESSE was conducted as a natural expansion of HCANJ's exercise program. While following the "building block approach" recommended in Homeland Security Exercise and Evaluation Program (HSEEP) guidance, prior to this full scale exercise, two tabletop exercises, "Ready-Set-GetOut" and "Black Diamond" were conducted to exercise the critical decision making skills of long term care facilities during emergencies requiring either an evacuation or sheltering-in-place. The subsequent After Action Report/Improvement Plan created as a result of the tabletop exercises, indicated that additional education, training, and emergency response equipment were indeed warranted to assist long term care facilities in their response during natural disasters.

Funding for this project was made available via the New Jersey Department of Health and Senior Services and the U.S. Department of Health and Human Services (HHS), Assistant Secretary for Preparedness and Response (ASPR), Office of Preparedness and Emergency Operations (OPEO), Division of National Healthcare Preparedness Programs Hospital Preparedness Program (DNHPP). HCANJ utilized grant funds to procure many of the resources necessary to conduct this exercise.

Equipment and resources such as New Jersey Disaster Triage Tags, Resident Evacuation Document envelopes, Nursing Home Incident Command System job action sheets, ICS vest kits, ICS quick reference manuals, New Jersey Healthcare Emergency Code Cards, and UHF handheld radios were provided to both player facilities and appropriate orientation and training was conducted with employees who would be responsible for their use.

HCANJ's Director of Emergency Preparedness assisted both participating facilities with emergency plan review, policy development, employee education and staff briefings related to the exercise. Employee training also included hands-on training to familiarize healthcare workers with the application of the human patient simulators within the exercise and was conducted by the Burlington County College – Center for Public Health Preparedness. Additionally, in preparation for the exercise, employees and managerial staff from both participating facilities were strongly encouraged to complete online Incident Command System (ICS) training via the FEMA Independent Study website and several short task-oriented ICS workshops were provided at both facilities.

Exercise Objectives, Capabilities, and Activities

Capabilities-based planning allows for exercise planning teams to develop exercise objectives and observe exercise outcomes through a framework of specific action items that were derived from the Target Capabilities List (TCL). The capabilities listed below form the foundation for the organization of all objectives and observations in this exercise. Additionally, each capability is linked to several corresponding activities and tasks to provide additional detail.

Based upon the identified exercise objectives below, the exercise planning team has decided to

demonstrate the following capabilities during this exercise:

- **Objective 1:** Evaluate the ability to safely and efficiently evacuate residents from a long term care facility.
 - **Onsite Incident Management:** Implement On-Site Incident Management; Establish Full On-Site Incident Command; and Resource Management.
 - **Shelter-in-Place and Citizen (Resident Evacuation):** Direct Evacuation Tactical Operation; Activate Evacuation; and Implement Evacuation Orders.
- **Objective 2:** Evaluate the ability to safely and efficiently medically surge a long term care facility.
 - **Medical Surge:** Pre-Event Mitigation and Preparedness; Increase Bed Surge Capacity; and Receive, Evaluate and Treat Surge Casualties.
 - **Communications:** Alert and Dispatch; Provide EOC Communications Support; and Return to Normal Operations

Scenario Summary

On May 18, 2011 HCANJ's Director of Emergency Preparedness receives information from the National Weather Service (NWS) indicating that a Tornado Watch has been initiated. This information is then provided via HCANJ's Emergency Alert System (AMERILERT) to all HCANJ members in the Tornado Watch area. At approximately 8:45am on May 19, 2011 straight line winds topple a large oak tree onto the roof section of the North Wing of Arcadia Nursing and Rehabilitation Center resulting in structural damage and water leakage into the building. There are nine (9) residents within the North Wing Short Hall at the time of the event. During this event, one resident will sustain serious head trauma and another will go into cardiac arrest. The damage to the facility dictates that residents within the North Wing must be moved to a triage area within the Atrium of Arcadia Nursing and Rehabilitation Center and then ultimately evacuated out of the facility to the Hamilton Continuing Care Center. Hamilton Continuing Care Center is responsible for establishing a triage and reception area to receive Arcadia Nursing and Rehabilitation Center residents.

Major Exercise Events

- HCANJ distributes NWS Tornado Watch
- Straight line winds topple large oak tree onto the roof of Arcadia
- One (1) Arcadia Nursing and Rehabilitation Center resident sustains head trauma and is transported to hospital.
- One (1) Arcadia Nursing and Rehabilitation Center resident goes into cardiac arrest while in triage area and is transported to hospital.
- Hamilton Continuing Care Center receives notification of resident surge and establishes surge/triage reception area within their facility.
- Remaining Arcadia Nursing and Rehabilitation Center residents are evacuated from facility.

- Two (2) surge residents are received at Hamilton Continuing Care Center without incident, one (1) surge resident arrives and goes into cardiac arrest upon entering triage area (DNR order is recognized – resident expires), two (2) surge residents arrive at Hamilton Continuing Care Center (one with skin tear that occurs during transport) and one (1) resident arrives in wheelchair and falls while exiting the transportation vehicle and sustains head trauma, one (1) surge resident arrives and goes into cardiac arrest upon entering triage area and is treated with an automated external defibrillator (AED).
- Media personnel arrive at Hamilton Continuing Care Center to interview Administrator about the event.



SECTION 3: ANALYSIS OF CAPABILITIES

This section of the report reviews the performance of the exercised capabilities, activities, and tasks. In this section, observations are organized by capability and associated activities. The capabilities linked to the exercise objectives of Operation JESSE are listed below, followed by corresponding activities. Each activity is followed by related observations which include analysis and recommendations.

CAPABILITY 1: ONSITE INCIDENT MANAGEMENT

Capability Summary: Onsite incident management is the capability to effectively direct and control incident management activities by using the Nursing Home Incident Command System (NHICS) consistent with the National Incident Management System (NIMS).



Activity 1.1: Implement Onsite Incident Management

Observation A: Area for Improvement. The immediate incident area of impact (North Wing) within Arcadia and the resident triage area were not efficiently managed to ensure proper accountability of potentially injured residents, healthcare workers did not utilize specific visual designators (evacuation door hangers) to indicate that they had searched all potentially affected resident rooms, and facility entrances, hallways and the triage areas were not effectively secured during the response within both facilities.

Analysis: Each fire extinguisher cabinet within Arcadia is provided with evacuation door tags that are to be used to clearly delineate that a resident room has been completely searched and evacuated; yet, these tags were never utilized during any phase of the evacuation. Many of Arcadia's managerial staff indicated that they were not familiar with the location of the door tags or their intended use during an evacuation event. Interestingly, if electrical power to the facility had been eliminated or if a smoke

condition were present, these door tags might be difficult to see. Facility entrances, hallways, and the triage areas were not sufficiently secured to prevent ambulatory residents of the building from either entering or exiting affected areas (North Wing Short Hall & Atrium triage area at Arcadia), thereby creating potential safety hazards, as well as, the lack of area control. During the initial search phase at Arcadia, “Sim-Nine” could not be located although a resident medical file was present. No “Code Gray” – (resident/patient elopement) was announced over the overhead system when “Sim-Nine” could not be located as would be expected. During the surge event, front desk personnel permitted “media” personnel to enter directly into the triage area of HCCC, giving “media” full, unescorted, and unfettered access to the incident scene.

Recommendations:

1. Arcadia personnel should be provided with additional education on the location and use of door hangers indicating “**EVACUATED**” and these tags should be exercised during each of the monthly facility fire drills. Another means of visual cue, such as green colored chemiluminescent lights might also be utilized when visibility is a factor such as during power outages, smoke conditions or fires.
2. All areas of the building including entrance and exit doorways, hallways and the triage area should be properly secured whenever a “Code Triage” is initiated. Personnel should establish and maintain internal perimeters of each resident room, hallway, triage area and building entrances to reduce potential injury to residents and the potential for resident/patient elopement, as well as, to prevent access by outside, non-facility credentialed personnel.
3. Long term care (LTC) personnel should universally adopt and become better trained on the use of New Jersey Healthcare Emergency Codes.

Observation B: Area for Improvement. A clearly denoted central point of command or “incident command post” was never established at either facility.

Analysis: An incident command post (ICP) is the location at which primary command functions are executed and provides a specific location for outside response agencies to report upon arrival. Typically, the ICP is located in the vicinity of the incident site and is the focus for conduct of direct, on scene control of tactical operations. Neither of the player facilities clearly established an incident command post. Although portions of the NHICS were activated within each facility, only HCCC actually activated their Emergency Operations Center (EOC). HCCC’s EOC was only utilized to provide an initial situational awareness briefing for their staff, but then was not utilized any further during the event. Player response remained tactical in nature and little consideration was evident regarding planning for future operational periods, long term staffing, and other strategic planning initiatives. In no instance was a written incident action plan developed or disseminated, most likely due to the time constraints of the exercise.

Recommendations:

1. Whenever an emergency event exists within a LTC facility, an ICP should be clearly established. In specific cases in which a safe triage area is warranted within a LTC facility, it is recommended that the ICP be created in the immediate area so that overall on-scene control of either evacuation or medical surge can be supervised and so that the facility Incident Commander can be immediately located by internal staff and external response agencies. A facility EOC might be staffed directly by a Logistics Section Chief who should function to provide communications services, acquire equipment, supplies, personnel, transportation services and other support services as indicated on their NHICS job action sheet.

Activity 1.2: Establish Full Onsite Incident Command

Observation A: Area for Improvement The specific roles and functions within the NHICS did not appear to be well understood by facility staff.

Analysis: Both facilities activated their internal Incident Command System and facility leadership personnel were clearly delineated with the deployment of ICS vests. Job action sheets were deployed and reviewed by the ICS team, although staff appeared unfamiliar and uncomfortable with their use.

Recommendations:

1. LTC facilities require additional training and education on the specific roles and functions of command and general staff positions within the Nursing Home Incident Command System.

Observation B: Strength Portions of the Nursing Home Incident Command System were utilized and universally embraced by both administrative and clinical employees of both facilities.

Analysis: The administrators from both facilities were actively involved throughout the incident. Administrators played an operational role in both the evacuation and medical surge/receiving of residents, which may not be the best use of their purpose within the Nursing Home Incident Command System structure. Similarly, during the Arcadia evacuation, the Triage Medical Director (ICS Branch) needed to remove herself from the front line action and coordinate response and treatment activities to better ensure proper resident tracking. Furthermore, there was not indication of accountability for staff, visitors and contractors who may have been present during the event.

Recommendations:

1. LTC facilities should conduct and participate in smaller scale discussion-based exercises to validate and strengthen their understanding of NHICS principles.
2. Whenever NHICS is instituted within a LTC facility during an event, an accurate and reliable means of accountability for residents, staff, visitors and contractors

must be quickly established in order to assist first responders upon their arrival on scene.

Activity 1.3: Resource Management

Observation A: Area for Improvement There did not appear to be a pre-existing resource inventory or an emergency inventory conducted of resources that were not affected as a result of the incident.

Analysis: Accountability of all available supplies, equipment, records, and equipment is essential early on during an incident. Several evaluators indicated that available resources were managed individually and assigned on a “first-come-first-serve” basis. This created confusion as to the location and availability of all resources required during both the evacuation and surge.

Recommendations:

1. Each facility should maintain an inventory of essential equipment that may be required during an emergency to help ensure medical continuity of care. This inventory should be tracked during the course of an event so that it may be compared to par levels for reimbursement purposes. Careful accounting and acquisition by a specific person (Central Supply Unit Leader within the NHICS) will ensure that each facility can account and document costs when applying for reimbursement if warranted.
2. Emergency carts stocked with emergency supplies essential during an emergency should be strategically placed throughout the facilities to ensure rapid access regardless of the incident location.
3. Ensure that all employees are trained and recognize the location of these and other evacuation/surge resources as well as, understand their roles within the NHICS.

CAPABILITY 2: SHELTER-IN-PLACE/CITIZEN (RESIDENT) EVACUATION

Capability Summary: Citizen evacuation and shelter-in-place is the capability to prepare for, ensure communication of, and immediately execute the safe and effective sheltering-in-place of an at-risk population (and companion animals), and/or the organized and managed evacuation of the at-risk population (and companion animals) to areas of safe refuge in response to a potentially or actually dangerous environment. In addition, this capability involves the safe reentry of the population where feasible.

Activity 2.1: Activate Evacuation

Observation A: Area of Improvement Evaluators indicated that the triage areas appeared chaotic and there was a lack of leadership and direction that resulted in diminished clinical decision-making. In addition, all of the medical conditions presented during the scenario were promptly recognized and basic clinical interventions within both player facilities were delayed or not appropriate given the illnesses/injuries presented by the human patient

simulators.

Analysis: Although it is recognized that certain artificialities exist within every disaster related drill or exercise, the lack of an effective command and control structure within both facilities resulted in:

- Lack of resident continuity of care;
- Incorrect or inappropriate prioritization of resident transfer for evacuation;
- Confusion as to the number of “residents” transported laterally or evacuated to triage areas and then eventually to the receiving facility;
- Failure to properly perform cardio-pulmonary resuscitation (CPR) and apply automated external defibrillator (AED) in accordance with the 2011 American Heart Association BLS and ACLS guidelines;
- Failure to provide manual and mechanical cervical spinal immobilization in residents presenting with suspected traumatic head, neck, back injuries;
- Residents who were separated from medical records or transported without their appropriate medical records.



At least some of these finding may be attributed to “exercise fatigue” and some unfamiliarity with the human patient simulators. However, this does not negate the importance of recognizing that basic first aid and triage principles were not consistently met throughout the duration of this exercise.

There were also several instances in which “residents” were left on their own and were not attended by healthcare workers and instances in which “residents” on stretchers were not strapped in or secured to prevent them from falling from stretchers. Oxygen canisters were

not secured while in use to provide initial first aid to the head trauma victim in the shower stall area and then again were not secured while in use within Atrium triage area at Arcadia.

Recommendations:

1. Employees within both player facilities should be provided with American Heart Association Healthcare Provider BLS Refresher Course.
2. Provide additional education and training on emergency triaging of residents and the universal use of the New Jersey Disaster Triage tag system.
3. Employees require education on basic first aid to include proper airway management, spinal immobilization, and bleeding control. Access to spinal immobilization equipment should be provided within the immediate area of operation.
4. The resident triage areas should be divided into “quadrants” based on triage assessments (uninjured, minor, delayed, and immediate) for prioritization of residents requiring transport, as well as, within the surge facility.

Activity 2.2: Direct Evacuation Tactical Operations and or In-Place Tactical Operations

Observation A: Strength Player facilities made timely and appropriate decisions to evacuate and shelter (triage) to ensure resident safety. HCCC mobilized equipment to support medical surge for acceptance of new residents in a timely manner.

Analysis: Dangers to residents within Arcadia were immediately identified (“structural damage and excessive water damage”). A damage assessment of the affected area was completed within 10 minute and the appropriate course of action to move residents out of the North Wing and into the Atrium of Arcadia was accomplished expediently. The resident casualty who sustained head trauma was rapidly identified, 911 was contacted and first aid initiated. HCCC’s triage area was established quickly in order to receive new residents.

Recommendations: None

CAPABILITY 3: MEDICAL SURGE

Capability Summary: Medical Surge is the capability to rapidly expand the capacity of the existing healthcare system (long term care facilities, community health agencies, acute care facilities, alternate care facilities and public health departments) in order to provide triage and subsequent medical care. This includes providing definitive care to individuals at the appropriate clinical level of care, within sufficient time to achieve recovery and minimize medical complications. The capability applies to an event resulting in a number or type of residents that overwhelm the day-to-day acute-care medical capacity. Medical Surge is defined as the rapid expansion of the capacity of the existing healthcare system in response to an event that results in increased need of personnel (clinical and non-clinical), support functions (laboratories and radiological), physical space (beds, alternate care facilities) and logistical support (clinical and

non-clinical equipment and supplies).



Activity 3.1: Pre-Event Mitigation and Preparedness

Observation A: Area of Improvement A yearly Hazard Vulnerability Assessment (HVA) has not been conducted at both LTC facilities.

Analysis: Emergency management officials from Hamilton Township participated as observers during the exercise and expressed great interest in response activities. Each LTC facility shall have a written comprehensive emergency operations plan that is developed in coordination with the local office of emergency management. This plan shall identify potential hazards that could necessitate an evacuation. Including natural disasters, national disasters, industrial and nuclear accidents, and labor work stoppages (NJAC 8:39-31.6(f) 1).

Recommendations:

1. Identify and list, by type, all hazards that could affect the location and the relative likelihood of each hazards occurrence (“threat”). Each facility should conduct an annual HVA with administrative staff, clinical staff, HCANJ’s Director of Emergency Preparedness and local/county Office of Emergency Management representatives.

Observation B: Area of Improvement “On Duty” administrative personnel have only limited means of monitoring situational awareness (i.e. weather events, public health and other regional incidents) to external conditions that could negatively impact their buildings, operations, staff, residents and visitors.

Analysis: Although HCANJ disseminated an initial emergency alert via a “Tornado

Watch”, this information is not reliably monitored on a facility level to ensure preparation activities are successful.

Recommendations:

1. HCANJ should continue to investigate the feasibility for integrating an Amerilert RSS feed directly onto the HCANJ website.
2. All LTC facility administrators should register to receive New Jersey Local Information Network and Communications Systems (NJLINCS) messages and should garner access and training to the NJDHSS Hippocrates system to ensure continuous, near-time situational awareness throughout the region.
3. Ham radios within both facilities should be turned “on” and monitored during emergency events.



Activity 3.2: Increase Bed Surge Capacity

Observation A: Area of Improvement The mattress type beds that were deployed in preparation for the medical surge of residents into the HCCC facility have only limited application for use with elderly and medically frail individuals who may have medical conditions.

Analysis: Air mattress are low to the ground, bulky, take approximately 15 minutes to inflate and do not allow residents to be moved into a reclining position, which might be required for feeding of the elderly, etc...

Recommendations:

1. Air mattresses are an acceptable means of providing emergency bed space on a temporary basis or might best be utilized for staff, but are not optimal for resident care. An adjustable Westcot 400 with frame and mattress (or similar) surge bedding might be better suited for application during medical surge, especially if used for extended periods of time.

Observation B: Strength Both participating LTC facilities maintain MOU/MOAs with an “in kind” receiving facility and an alternate facility to accept residents in case of evacuation.

Analysis: Requirements for LTC are ambiguous with regard to the potential for Office of Emergency Management interpretation as to how many beds must be established within MOU/MOAs for facilities who accept residents during an evacuation event. NJAC (8:39-31.6(f)2) does not clearly indicate or denote that a facility must account for alternate bed space for **each** and **every** bed for which a LTC facility is licensed for.

Recommendations:

1. Future revisions of NJAC 8:39 should clearly define the requirements for alternate facility(s) to which residents would be located during an emergency evacuation of a LTC facility and must take into account the actual numbers of alternate beds for which they are licensed. Thus, a 150 bed LTC facility would need to demonstrate via their MOU/MOAs, that they can place all 150 of their residents, (regardless of current occupancy) with an “in-kind” facility.

Activity 3.3: Receive, Evaluate and Treat Surge Residents



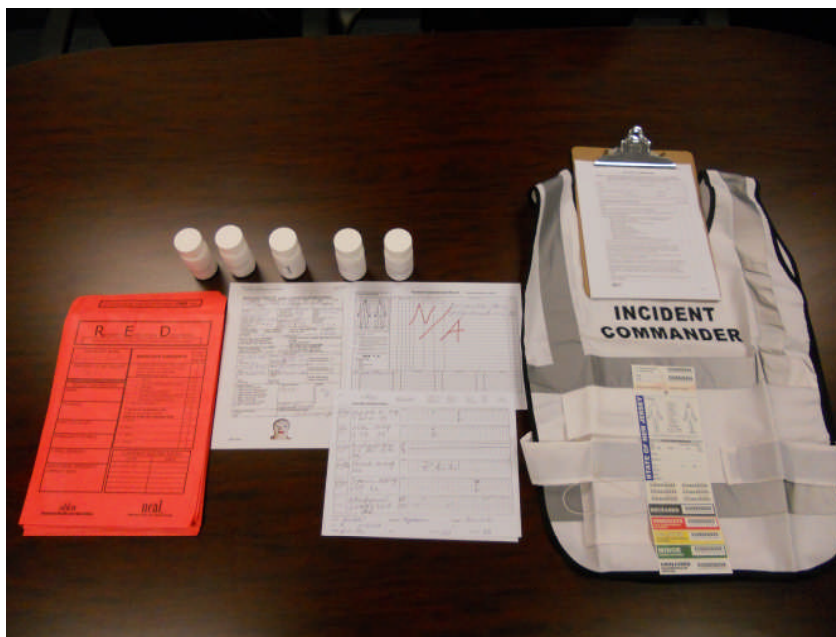
Observation A: Area of Improvement Medical personnel from HCCC were not present at all times within initial receiving areas located at the employee entrance of the facility.

Analysis: HCCC's Incident Commander maintained a presence in the initial receiving area at the employee entrance designated to receive surge residents, but was not medically qualified to provide the immediate and necessary first triage evaluations of resident status upon arrival. When SIM-One "Chester" was received and then subsequently fell into cardiac arrest, there was a delay in the identification of this condition and subsequent delay of medical intervention and treatment.

Recommendations:

1. A medically qualified member of the receiving facility staff should be posted at the resident receiving area of the facility at all times when surge residents are received.

Observation B: Strength Both participating player facilities made efforts to ensure that medical records and medicines were collected, staged and then ultimately transported with evacuated "residents" and utilized, **Resident Evacuation Documents** (RED envelopes) and New Jersey Disaster Triage tags.



Analysis: Prior to the exercise, each human patient simulator "resident" was provided with an Arcadia wrist identification band, matching fictitious medical records, and various medication bottles that were clearly labeled and identified with resident information. Arcadia healthcare workers were observed on several occasions checking to ensure that all of these items matched and provided adequate **initial** assessment of casualties. Bar coding available on the triage tags was used to cross reference evacuated residents; however the triage tags were not always used properly. HCANJ purchased RED envelopes using NJDHSS grant funds and these were provided to each participating facility for use during the exercise. These envelopes provided an easy, readily identifiable, and recognizable means of transporting essential resident medical

records/medicines during an emergency event.

Observation B: Strength Staff within both player facilities provided palliative care, as appropriate, to patient simulators who displayed signs and symptoms of pain, worry and distress and were careful to check medical records for indications of “Do Not Resuscitate” (DNR) orders. Healthcare workers demonstrated a high level of respect and understanding of the special consideration and sensory changes for elderly residents throughout the exercise.

Analysis:

Recommendations: None

CAPABILITY 4: COMMUNICATIONS

Capability Summary: Communications is the fundamental capability within disciplines and jurisdictions that practitioners need to perform the most routine and basic elements of their job functions. Agencies must be operable, meaning they possess sufficient wireless communications capabilities to meet their daily internal and emergency communication requirements before they focus on interoperability.

Activity 4.1: Alert and Dispatch

Observation A: Area of Improvement Although overall communications via handheld UHF radios were very good and radios were used effectively, much of the communications between responders, recognized during the evacuation component, was verbal in nature and was not able to be tracked as it was not documented for all to see.

Analysis: Internal communications were established during response using common language (i.e. plain English) to ensure information was clear, acknowledged, and understood by receivers, but facility responders were not certain as to who was in possession of a radio during the response.

Recommendation

1. Handheld radios could be utilized more often during normal operations to provide clinical staff with more familiarity in their use. Additionally, an “incident status board” should be considered to help track resources and events during an emergency.

Observation B: Strength The overhead paging system within both Arcadia and HCCC was utilized effectively to alert healthcare workers of the incident. Arcadia instituted a “Code Triage - Internal” and HCCC instituted an “Code Triage - External” consistent with the New Jersey Emergency Code System.

Analysis: Previous workshops were conducted within each LTC facility that introduced the New Jersey Emergency Code System and each employee was provided with a code card to be maintained as a reference along with their employee identification.

Recommendation

1. Continue facility in-service education for current and new employees on the use of the New Jersey Emergency Code System. Ensure that all employees maintain a New Jersey Emergency Code card with them at all times.

Activity 4.2: Provide EOC Communications Support

Observation A: Area of Improvement Both player facilities had not established, staffed, and maintained an internal incident command post and/or emergency operations center for the duration of the event.

Analysis: An “Emergency Operation Center” had been established within a conference room at HCCC, but this current room has only limited communications capabilities and was not staffed throughout the response. Thus, incident information was not communicated between the response “scene”, incident command post, and an emergency operations center. Moreover, a centralized area of information collection and designation might also be required during a larger emergency event.

Recommendation:

1. A pre-established Emergency Operation Center should be developed within both facilities that is fully functional in terms of communications capabilities, (phones, fax, radios, media monitoring abilities etc...) and which serves to coordinate activities relevant to medical evacuation and surge (transfer of information between receiving facilities, interaction with external support agencies, families etc..)

Activity 4.3: Return to Normal Operations

Observation A: Strength All communications resources/devices were returned to normal operational status at the end of the exercise.

Analysis: NA

Recommendations: None

SECTION 4: CONCLUSION

The Joplin, Missouri event clearly demonstrated that there may be times during which healthcare workers within long term care facilities are inadvertently thrust into critical emergency response scenarios for which they are not familiar. Long term care facilities throughout New Jersey are clearly not immune to disasters. Regardless of this potential, the fact still remains that long term care facilities are a key component of the healthcare continuum and as such, they must continue to be integrated into all phases of the emergency preparedness cycle including planning, organizing/equipping, training, exercising, evaluation, and the continued improvement process.

Although there are many significant differences in their response capabilities as compared to the acute care sector, long term care facilities share an important responsibility in emergency preparedness; ultimately to ensure the health and safety of their residents, staff and visitors. It is the long term care industry's responsibility to be prepared for all hazards.

Operation JESSE was HCANJ's first full scale exercise jointly planned and executed to measure evacuation and medical surge capabilities between two long term care facilities using human patient simulators. Although the scope of this exercise was designed specifically for long term care facilities, the actual "play" of the exercise was observed by representatives of emergency management, fire, public health, emergency medical services, as well as, other members of the healthcare continuum including hospitals, home care agencies, and Federally Qualified Health Centers. The exercise design team sought to garner a greater perspective of the various components of their overall emergency response capabilities, but also endeavored to help demonstrate the commitment and importance of including the long term care community in New Jersey's future emergency preparedness initiatives.

Long term care facilities are distinctive in their healthcare organizational structure and serve a unique population demographic of elderly, frail or otherwise medically compromised individuals who are statistically at greater risk of increased morbidity and mortality during catastrophic public health events. The exercise was successful in identifying that regardless of these unique characteristics, long term care facilities still share many of the same emergency preparedness challenges as their partners in emergency management, public health, and other sectors of the healthcare continuum.

The exercise data and observations collected during Operation JESSE were used to form this After Action Report and Improvement Plan, but also may be used as the baseline for future HSEEP compliant full scale exercises within long term care facilities. The results of Operation JESSE identified many challenges in emergency preparedness for long term care facilities. Operation JESSE was a success as it emphasized that long term care facilities must not be ignored in the overall emergency management planning process.

APPENDIX A: IMPROVEMENT PLAN

This IP has been developed specifically for Arcadia Nursing & Rehabilitation Center, Hamilton Continuing Care Center, and the Health Care Association of New Jersey as a result of Operation Jesse conducted on May 18-19, 2011. These recommendations draw on both the After Action Report and the After Action Conference.

Table A.1 *Improvement Plan Matrix*

Capability	Observation Title	Recommendation	Corrective Action Description	Capability Element	Primary Responsible Agency	Agency POC	Start Date	Completion Date
On Site Incident Management	Arcadia healthcare workers were not familiar with the location and use of visual evacuation door hangers.	Provide all staff with training and education on use of evacuation door hangers or other visual means of delineating that resident rooms have been evacuated	Augment internal employee training and education	Training	Arcadia	Zrinko	6/15/11	7/1/11
	Inconsistent use of New Jersey Healthcare Emergency Codes	Long term care personnel should universally adopt and become better training on New Jersey Healthcare Emergency Codes	Continue to provide HCANJ member facilities with access to NJ Healthcare Emergency Code cards	Training	Arcadia HCCC HCANJ	Zrinko DeCampe Weidner	6/15/11	6/30/12

	Clearly denoted central point of command or "Incident Command Post" was never established at either LTC facility	Each facility emergency management plan should designate specific "ideal" locations that might be used during an emergency (including inside resident triage areas) depending on the scope of the incident	Revise plans to incorporate maps indicating ideal locations for Incident Command Posts	Planning	Arcadia HCCC	Zrinko DeCampe	6/15/11	8/15/11
	Portions of the Nursing Home Incident Command System were utilized during emergency response	LTC staff continue to require additional training and education on the Nursing Home Incident Command System (NHICS) to become more familiar with its proper use during events	Continue to promote ICS within LTC and market accessibility via online FEMA Independent Study and promote LTC participation in discussion-based exercises	Training	HCANJ	Weidner	7/1/11	6/30/12
	Player facilities did not maintain a pre-existing resource inventory of critical supplies that might be utilized during a medical surge event	Create a essential resources list of essential equipment	Provide resource list of essential equipment within facility emergency management plans and update as warranted	Planning	Arcadia HCCC	Zrinko DeCampe	6/15/211	9/15/11

	All areas of building including entrance and exits, hallways and triage areas are not effectively secured during "Code Triage"	Provide all staff with training and education and exercise security "lock-down" procedures during monthly fire drills	Identify all areas that are required to be secured during a "Code Triage" and augment internal employee training and education	Training	Arcadia HCCC	Zrinko DeCampe	6/15/11	7/1/11
Shelter In Place Citizen (Resident) Evacuation	Triage areas appeared chaotic and resulted in diminished levels of basic clinical interventions	Player facilities should "map" and organize triage areas in quadrants that are congruent with New Jersey Disaster Triage Tag designations and should provide CPR, AED and basic first aid refresher training for staff	Augment internal employee training and education	Training	Arcadia HCCC	Zrinko DeCampe	6/15/11	6/30/12

Capability	Observation Title	Recommendation	Corrective Action Description	Capability Element	Primary Responsible Agency	Agency POC	Start Date	Completion Date
Communications	Evacuation and surge progress was not tracked accurately	Provide a "status" white board within the triage areas to help visually monitor the progress of evacuations and surge numbers. Ensure that Transfer & Discharge Unit Leader (NHICS) properly tracks resident location status	Resident tracking requires integration directly to the Incident Command Post to aid first responders and monitor event status	Equipment	Arcadia HCCC	Zrinko DeCampe	7/1/11	9/15/11
Medical Surge	An annual Hazard Vulnerability Assessment (HVA) has not been conducted at both player facilities	Conduct HVAs	HCANJ will coordinate and/or conduct an HVA with both LTC facilities in coordination with local Emergency Management	Planning	HCANJ	Weidner	7/1/11	9/1/11

	LTC administrative personnel have only limited access to situational awareness of public health and emergency events that may affect their operations	Continue to encourage HCANJ membership to participate in HCANJ Amerilert emergency notification system, NJLINCS, and Hippocrates	HCANJ will maintain Amerilert database and continue to promote NJLINCS and Hippocrates	Planning	HCANJ	Weidner	7/1/11	6/30/12

APPENDIX B: LESSONS LEARNED

Long Term Care

- “Command and Control” of the triage area is critical to ensure accurate resident tracking and may be best accomplished if the triage area is divided into quadrants that correspond with priority levels for evacuation.
- Medical personnel should be present at all times while receiving surge residents.
- An Incident Command Post should be established in a safe area that can oversee evacuation and surge activities.
- Radio distribution should occur quickly and all long term care personnel should be familiar with the use of facility radios, as well as, who has access to these radios.
- NHICS concepts can be complicated. LTC facilities should, at the very least, be familiar with the basics of the Nursing Home Incident Command System and how it is applied during emergencies.
- “Decisional Space”. Timely and effective communication with emergency management partners and facilities who share MOUs/MOAs is critical to help prepare for the potential response to an evacuation of a long term care facility. More time provides for more response options.
- Simple resources such as **Resident Evacuation Document** envelopes and NJ Disaster Triage Tags helped to organize resident tracking and streamline resident processing during the evacuation and medical surge event.
- The use of white boards or other visual indicators within the triage area would be useful to assist command staff with tracking resident evacuation status and NHICS positions.
- Visual indicators, such as door hangers or green colored chemiluminescent lights should be utilized to confirm room evacuations when visibility is a factor such as during power outages, smoke conditions or fires.

Human Patient Simulators

- Players should be introduced to the functions and capabilities of the human patient simulators prior to the exercise.
- Non-operational simulators should be clearly identified to eliminate player confusion during exercise play.
- Simulators should be programmed with a “back-up” medical scenario, just in case “expected actions” identified on the Master Scenario Events List (MSEL) do not materialize during exercise play.
- Simulators are not “perfect” – the current computer technology, compressors etc... do make “non-human” sounds that may be misinterpreted by medical staff.

Exercise Design

- Follow Homeland Security Exercise Evaluation Program guidance throughout the exercise planning and development process.
- The MSEL “Playbook” is your best friend to help ensure exercise flow.
- Garner management commitment to the entire HSEEP exercise design process.
- “Strength of a Team” – Be flexible!