2021 Northeast Ohio Healthcare Coalition Burn Surge Tabletop Exercise

Health Care Coalition (HCC) After-Action Report/Improvement Plan (AAR/IP)

Exercise Type: Virtual Tabletop

Date of Exercise, Event, or Real-World Response: 2/10/2021

Date HCC AAR/IP Completed: 4/7/2021

Subrecipient Name: The Center for Health Affairs

Subrecipient Jurisdiction: Region 2 NE HCC

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EXERCISE OVERVIEW

Exercise Name	2021 Northeast Ohio (NEO) Healthcare Coalition (HCC) Burn Surge Tabletop Exercise (TTX)
Exercise Dates	02/10/2021
Scope	This is a virtual tabletop exercise that was planned for two hours using WebEx platform. Exercise participation was limited to NEO HCC and State organizations that would have a role in response to mass casualty burn incident in Ashtabula, Ohio.
Mission Area(s)	Response
HPP and PHEP Capabilities	HPP Capability #1: Foundation for Health Care and Medical Readiness HPP Capability #2: Health Care and Medical Response Coordination HPP Capability #4: Medical Surge PHEP Capability #10: Medical Surge
Objectives	1. Discuss/identify partner roles, responsibilities and capabilities during a burn surge, related to a mass casualty incident in NEO Region. 2. Discuss/identify the activation process for the NEO HCC draft Burn Surge Annex. 3. Discuss/identify essential elements of information (EEIs) and the process for information sharing among the NEO Region response partners during a burn surge, related to a mass casualty incident. 4. Discuss/identify the process for receiving, managing, and transferring, including the mode, of burn patients from scene and hospitals to the appropriate facilities in a burn mass casualty incident (BMCI).
Threat or Hazard	Burn Surge Related to a Mass Casualty Incident
Scenario	Several large explosions with more than 50 homes and businesses on fire in City of Geneva due to over pressurized gas line. There are 280 reported injuries reported with varying percentages of burns that include adults and children. Local hospitals and trauma centers are overwhelmed, and bed availability is limited.
Sponsor or Lead Agency	NEO Healthcare Coalition, ASPR Regional Health Care Coordination Hospital Preparedness Program (HPP) State Fiscal Year 2021 (SFY21).

Participating Organizations	Total Number of Organizations Participating: 21. See ***Appendix B*** for the complete list by organization type and the total number of participants by organization.
Primary Point of Contact	Andrea Bishop, Project Manager, Emergency Preparedness The Center for Health Affairs 1226 Huron Rd, East Cleveland, Ohio 44115 andrea.bishop@chanet.org 216-255-3662 (office)

EXECUTIVE SUMMARY

The 2021 NEO HCC Burn Surge Tabletop Exercise was designed to test the Burn Surge Annex to Northeast Ohio HCC Response Plan with coalition partners who would be involved in the response to a burn mass casualty incident in the region. The NEO Burn Surge Annex is a supplement to, not a replacement for, the response actions and resources described in facility and county emergency operation plans (EOP) and provides additional details and considerations relevant to an incident that involves significant numbers of burn victims. The four objectives focus on fostering a discussion of agency roles and responsibilities, plan activation, information sharing for situational awareness and response support, and on patient management operations.

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 incident are as follows:

- Number of skilled and experienced partners that participated in the exercise knowledgeable of their role and plans who framed a genuine and realistic approach to the coordination of response based on the scenario and available capabilities.
- The local Fire Department (FD) has a clear understanding of the initial steps to get organized and create a working Incident Command Structure (ICS) with operational groups to manage the incident.
- Local Emergency Medical Services (EMS) has a solid understanding of the concept of operations that would be used to manage the incident on scene along with available resource and transportation support assets.
- Hospital capabilities in this region to treat the large number of injured during BMCI along with availability and willingness of subject matter experts (SME) for clinical care consult.

Primary Areas for Improvement

Throughout the exercise, several opportunities for improvement in NEO Health Care Coalition's ability to respond to the incident were identified. The primary areas for improvement are as follows:

- Clarification on the role of State Burn Coordination Centers including levels of agency interface and expected areas of coverage.
- Clarity on the flow of communication across response agencies along with tools and processes that would be used to maintain situational awareness.
- Education and awareness training on the existence of the regional annex and state burn plans and how they relate to facility surge and county mass casualty plans.

Overall, the 2021 NEO HCC Burn Surge TTX provided a good learning opportunity for participants. The exercise afforded opportunities for each agency to discuss their roles and identify ways to coordinate with response partners. An event of this magnitude would stress the whole community emphasizing the importance of periodically testing established plans on both local and

regional levels. Future exercises planned in the NEO Regional HCC should focus on continuing to develop aspects of all four HPP capabilities:

- Foundation for Health Care and Medical Readiness
- Health Care and Medical Response Coordination
- Continuity of Health Care Service Delivery
- Medical Surge

This AAR/IP is funded either in whole or in part by a grant awarded by the Ohio Department of Health (ODH), Office of Health Preparedness (OHP) as a sub-award of a grant issued by the Office of the Assistant Secretary for Preparedness and Response (ASPR) under the Hospital Preparedness Program (HPP) EP-U3R-19-001, and CFDA number 93.889.

CAPABILITY RATINGS

Aligning exercise objectives and HPP Capabilities provides a consistent taxonomy for evaluation that transcends individual exercises and real-world responses to support preparedness reporting and trend analysis. The HPP Capability Rating Table shows the rating assigned to the HPP Capability activities and PHEP Capability tasks that were evaluated during the tabletop (TTX). All ratings identified on the HPP Capability Rating Table are required to be detailed/expanded upon in the capability analysis section of this AAR/IP to support the ratings. Activity boxes should be left blank if the activity was not demonstrated in the exercise.

NOTE: The rating of "P" must only be used for strengths. The rating of "S", "M" or "U" will only be used for areas of improvement.

HPP Capability Rating Table

CAPABILITY RATINGS: Input the corresponding letter rating into the appropriate field(s) on the HPP Capability Rating Table.

P - Performed without Challenges: The HPP activity associated with the capability was completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this task did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. If "P" is selected there should not be an associated area of improvement. If an area of improvement is identified, please select another rating.

M - Performed with Major Challenges: The HPP activity associated with the capability was completed in a manner that achieved the objective(s), but some or all of the following were observed: demonstrated performance had a negative impact on the performance of other activities; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws.

S – Performed with Some Challenges: The HPP activity associated with the capability was completed in a manner that achieved the objective(s) and did not negatively impact the performance of another activity. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency were identified.

U – Unable to be Performed: The HPP activity associated with the capability was not performed in a manner that achieved the objective(s).

N – Not observed: Use this rating if the evaluator did not observe the HPP activity. If "N" is selected, please provided justification as to why the corresponding activity was not observed.

D – Discussed Not Demonstrated: The HPP activity associated with the capability was discussed in a manner that achieved the objective(s). This rating should only be utilized for activities that were discussed during a TTX or if the activity is discussion based.

HPP Capability	O	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A1
1. Foundation for Health Care and Medical Readiness	1											
	2		D									
	3											
	4			D			D					
	5			D								
2. Health Care and Medical Response Coordination	1											
	2	D		D								
	3	D		D	D							
3. Continuity of Health Care Service Delivery	1											
	2											
	3											
	4											
	5											
	6											
	7											
4. Medical Surge	1	D	D	D								
	2	D	D				D	D	D			

PHEP Capability	F	T1	T2	T3	T4	T5	T6	T7	T8
10. Medical Surge	1	D							
	2			D	D				
	3			D					
	4								

HPP CAPABILITY ANALYSIS

The following sections provide an overview of the performance related to each exercise objective and associated HPP and PHE Capability (ies), highlighting strengths and areas for improvement(s), and specific reference and support documentation. The supporting capability analysis detailed below is directly linked to the HPP Capability Rating Table.

Objective 1: Discuss/identify partner roles, responsibilities and capabilities during a burn surge, related to a mass casualty incident in NEO Region.

The strengths and areas for improvement for each HPP Capability aligned to this objective are described in this section.

HPP Capability: #1 Foundation for Health Care and Medical Readiness
PHEP Capability: #10 Medical Surge

Strengths

The partial capability level, down to the objective (O) or function (F) and activity (A) or task (T) can be attributed to the following strengths:

Strength 1: Number of skilled and experienced partners that participated in the exercise knowledgeable of their role and plans who framed a genuine and realistic approach to the coordination of response based on the scenario and available capabilities. (O2-A2; O4-A3, -A6; O5-A3; F1-T1)

Strength 2: Local Fire Department (FD) has a clear understanding of the initial steps to get organized and create a working Incident Command Structure (ICS) with operational Groups to manage the incident. (O2-A2; O4-A3, -A6; O5-A3)

Strength 3: Local Emergency Medical Services (EMS) has a solid understanding of the concept of operations that would be used to manage the incident on scene along with available resource and transportation support assets. (O2-A2; O4-A3, -A6; O5-A3)

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Clarification on the role of State Burn Coordination Centers including levels of agency interface and expected areas of coverage.

Reference: Ohio Statewide Hospital Burn Surge Plan, October 2020; Burn Surge Annex to HCC Response Plan Northeast Ohio, 12/14/2020

Analysis: Each agency had an initial concept of operations that they were familiar with and would implement during the initial phase of the incident. This understanding of initial roles and responsibilities was heavily influenced by existing hospital medical surge and local mass casualty planning. The FD and EMS had a clear understanding of the initial steps to get organized and create a working ICS utilizing unified command to manage the incident. Local EMS is very familiar with their hospital capacities and capabilities. The Incident Command/Unified Command

(IC/UC) was comfortable with the initial movement of burn patients from triage to the base hospital. The IC/UC felt it was not realistic for them to track down SME at varying locations, so they would default to the base hospital for that request, who in turn would reach out to a SME at a more specialized facility. Concern would be hospital closest to scene would be inundated quickly by both EMS and self-transported patients. The need to decompress the local emergency department would be strong. The Incident Commander (IC) would depend heavily on the Triage/Transport Officer to work with Dispatch to:

- Arrange transport to the base hospital
- Acquire additional transport
- Find other surge hospitals
- Make required notifications for MCI activation.

As the exercise discussion continued and the numbers of casualties increased, these assumptions became less informing for the participants. Hospitals are accustomed to the regional burn center accepting patients with burn injuries when contacted from hospital emergency department physicians but because of the volume and lack of full picture of the scene, further coordination with the regional burn center is necessary. It will take about an hour after the initial event for MetroHealth Medical Center to have a better idea of what the severity of the situation is and what their capabilities will be.

MetroHealth Medical Center is centrally located in the region and serves as the State Burn Coordination Center in the upper half of the state. They are supported by four other Level I and II Trauma Centers and seven Level III Trauma Centers which can serve as Burn Surge Facilities (BSF) and are located across the NEO region. On a daily basis MetroHealth Medical Center provides burn services in their 14 bed unit. The next closest burn center is Akron Children's Hospital which is about 40 miles south of Cleveland and will accept both children and adult burn patients. Trauma designated hospitals will be considered first line for burn surge when delayed transfer to a designated burn center is expected. The other 15 hospitals in NE Ohio have varying degrees of supplies and equipment and can stabilize a burn victim for 24-48 hours followed by transport to regional hospitals for definitive care during a mass casualty event. Collectively between the Burn Center and other Level I, II and III Trauma Centers, 100 patients can be initially cared for in the region.

The NEO Burn Surge Annex was developed in an effort to expand the ability of regional hospitals to provide burn care, to safeguard and prioritize the utilization of limited resources. The Annex incorporates the utilization of tiered approach distribution and coordination by planning for the provision of stabilizing care for burn patients in facilities that are not normally associated with providing definitive care to burn patients. The ability to standardize the care that will be provided in hospitals that do not provide definitive burn care has been agreed upon to safeguard critical resources and, ultimately, improve outcomes for patients.

Discussing involvement of Ohio State University Wexner Medical Center (OSU) as the burn surge coordination center was met with some hesitation. Point was made that since OSU was located in another region of the state, their staff was not familiar with the capabilities of NEO hospitals and would not be able to effectively assist with patient distribution during the first phase. They could help with clinical guidance and would have role helping to find burn center beds for patients that needed to be transferred to burn center after they had been transported from

scene to a hospital. Unclear when they would be included in the response and to what level. Trauma patients cared for at trauma centers and from there, discussions can be made in controlled environment based on individual patient needs. Does not have to be immediate as hospitals are capable of treatment and have access to SME.

Objective 2: Discuss/identify the activation process for the NEO HCC draft Burn Surge Annex.

The strengths and areas for improvement for each HPP Capability aligned to this objective are described in this section.

HPP Capability: #2 Health Care and Medical Response Coordination
PHEP Capability: #10 Medical Surge

Strengths

The partial capability level, down to the objective (O) or function (F) and activity (A) or task (T) can be attributed to the following strengths:

Strength 1: NEO HCC has developed the Burn Surge Annex as an extension of its HCC Emergency Response Plan Northeast Ohio to supplement local response plans and dove tail with State Burn Surge Plan for smooth transition as resources needs are identified to assist with management of a mass casualty incident involving a large number of burn patients. (O3-A1, A3; F2-T3)

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Education and awareness training on the existence of the regional annex and state burn plans and how they relate to facility surge and county mass casualty plans.

Reference: HCC Emergency Response Plan Northeast Ohio, 4/3/2020; Burn Surge Annex to HCC Response Plan Northeast Ohio, 12/14/2020

Analysis: There was not a clear consensus among responders for regional plan activation. When the scenario was presented, the discussion focused on activation of facility surge and county mass casualty plans. Conversations supported that participants were knowledgeable of their capabilities and confident in their skills to manage as they continued to size up the scene and identify plan activation steps that would be initiated. Each county in NEO has mass casualty annex to their county EOP inclusive of triage care and guidance of patients who should be transported to burn center based on assessment of burn injuries. Pre-hospital protocols provide detailed guidance for clinical care. Plans did not address what to do when number of burn victims outnumbered the available burn beds. That process is included in the NEO HCC Burn Surge Annex, the new plan being tested for the first time in this TTX. The Burn Surge Annex was shared with players prior to the TTX with the expectation that they would review prior and have available for reference during the discussion.

The Annex identifies that the process for activation would follow the HCC Emergency Response Plan's Concept of Operations for Incident Recognition, Activation and Notification. Six potential triggers were listed:

- Individual or system hospitals determine that they cannot adequately care for the numbers of burn patients coming to their door. When demands exceed resources.
- Estimated maximum capacity burn surge based on 1.9 mill population is approximately 100 patients with understanding variables can raise or lower that number depending on event and current bed status
- 75% saturation of available beds in Level 1-3 trauma centers due to multiple burn patients presenting to multiple hospitals, multiple burn patients requiring transfer to a regional burn center which would trigger activation of the State MOU and State Burn Surge Plan
- 40+ patients coming to the regional burn center would activate the State MOU and State Burn Surge Plan
- A request to activate or monitor by a HCC member or partner (EMA, EMS, any statewide burn facility, Regional Healthcare Coordinator (RHC) or contiguous state EMA or healthcare facility) due to estimates of potential victims and transfer between regions or hospitals.
- Awareness through open source media (news, Facebook or Twitter) and verification of an incident through appropriate response channels that a scenario is unfolding.

The trigger to activate the plan is not a set number, but more situational and it would be up to local jurisdiction to initiate communication. The participants indicated that there was not a hard threshold, but the decision to activate this plan was influenced by the ability of the Scene Triage and Treatment to effectively handle and transport patients and the ability of the base hospitals to take in patients and find treatment and bed space for them. If these capabilities were exceeded, then the plan is activated. The scenario ticked all of these boxes as it evolved but none of the participating agencies clearly took the lead to say that they would request regional plan activation.

The Annex further states that decision to activate the plan is a result of the Patient Focus Call. The RHC is tasked with coordinating the Patient Focus Conference Call during which the RHCs will supply critical information from the hospitals within their region to the State Burn Coordination Center (SBCC) resulting in the decision to activate the plan. It was unclear if this is referring to the Regional or State Burn Surge Plan. There was no mention to request the Patient Focused Conference Call during the discussion but participants indicated that this call would not be able to take place until later during incident response.

At this point the IC/UC would be in charge of the scene, the Base hospital(s) would be in charge of receiving and begin coordinating with other hospitals for patient transfers, and the RHC would begin coordination and information sharing with regional and state stakeholders. Portions of the Regional Response Plan were discussed to be activated and implemented but it would be up to the IC, hospitals or MetroHealth Medical Center Burn Center to request.

Objective 3: Discuss/identify essential elements of information (EEIs) and the process for information sharing among the NEO Region response partners during a burn surge, related to a mass casualty incident.

The strengths and areas for improvement for each HPP Capability aligned to this objective are described in this section.

HPP Capability: #2 Health Care and Medical Response Coordination

Strengths

The partial capability level, down to the objective (O) or function (F) and activity (A) or task (T) can be attributed to the following strengths:

Strength 1: No strengths were identified. (O2-A1, -A3; O3-A1,-A3,-A4)

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Clarity on the flow of communication across response agencies along with tools and processes that would be used to maintain situational awareness.

Reference: HCC Emergency Response Plan Northeast Ohio, 4/3/2020; Burn Surge Annex to HCC Response Plan Northeast Ohio, 12/14/2020

Analysis: Communication pathways utilized on daily basis between response agencies and healthcare facilities are well established. Several forms exist to share information across system and regional hospitals and to state organizations as needed. There is some variation of mass notification systems utilized by counties. The modes and process for information sharing were ill-defined during the discussion as there are variables based on the type of event, location, and resources available at the time. Those responders engaged in direct patient care were actively discussing what they would be doing and the conversation focus was on immediate needs as they sized up the situation and started local partner agency notifications to EMA, hospitals, and public health departments. A cascade of communications would ensue as the different agencies became aware of situation. External and internal information sharing actions was varied among each agency as expected since the EEI needed to maintain situational awareness is based on the roles and responsibilities and organizational demands of each agency.

Lead agency was not clearly identified. FD IC indicated that they would request assistance from their county EMA to appoint a public information officer (PIO) to assist with communications and updates to the public. What agency the PIO would be representing was left unsaid.

Base hospital (BH) closest to scene stated they could communicate easily with scene using the Ohio Multi-Agency Radio Communication System (MARCS), ICS structure and their system Transfer Center could help with patient destinations. Beyond the local communication processes between pre-hospital, hospital and system hospital transfer centers, all participants stated they would be activating command centers and use of ICS would help with communication with other agencies.

RHC shared that if she was contacted, she would take steps to assist. Even if she learned of the incident by other means and was not contacted directly, the RHC stated she would reach out to the involved hospital emergency manager (EM) for updates and needed resources. SurgeNet bed availability will be requested right away after RHC has confirmation of incident by sending an alert message to regional hospitals via Ohio Public Health Communication System (OPHCS). The bed system has been around since 2006 and is used by hospitals daily and during events as a valuable tool to maintain awareness of bed availability which is viewable to all hospitals and the State Health Department.

OHTrac is module included on SurgeNet for patient tracking. It also is visible to those with access across the region and state and although introduced to most response agencies it is not used routinely and there are challenges for the individual agencies to adopt and continue training at the facility level. Use of OHTrac would be invaluable to have visual of patient numbers, acuity and locations. An incident is created per established county process, Ohio Fire Chief Dispatchers, other hospitals or RHC can assist if needed. Patients are then tracked to the incident using triage tag number or number assigned at hospital if self-presenting. Data entry from field would be ideal but depends, burden will be on hospitals to make sure patients they receive are entered into system. Patients are updated in the incident as locations change by the receiving hospital.

The hospitals know their available beds against bed capacity and have an understanding of the levels of burn care treatment they can provide for a burn surge incident. Local EMS is familiar with their local hospitals. The total number of beds available in the region would be constantly changing as hospitals implement their surge plans. SurgeNet hospital bed availability and tracking the patients by injury severity and location into the OHTrac incident gives real time picture of surge and resource availability.

Once patients were distributed throughout area to different hospitals, task would be to coordinate communication between those hospital command centers and transfer centers to help with patient redistribution as needed. The concept of system hospital Transfer Centers coordinating with each other was introduced during 2019 pandemic to assist with patient load distribution. The centers have exchanged contact numbers but this process has not been needed or tested.

Objective 4: Discuss/identify the process for receiving, managing, and transferring, including the mode, of burn patients from scene and hospitals to the appropriate facilities in a burn mass casualty incident (BMCI).

The strengths and areas for improvement for each HPP Capability aligned to this objective are described in this section.

HPP Capability: #4 Medical Surge
PHEP Capability: #10 Medical Surge

Strengths

The partial capability level, down to the objective (O) or function (F) and activity (A) or task (T) can be attributed to the following strengths:

Strength 1: Hospital capabilities in this region to treat large number of injured during BMCI along with availability and willingness of subject matter experts (SME) for clinical care consult. (O1-A1-3; O2-A1, A2, A6, A7; F1-T1, T3)

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: No areas for improvement identified.

Reference: HCC Emergency Response Plan Northeast Ohio, 4/3/2020; Burn Surge Annex to HCC Response Plan Northeast Ohio, 12/14/2020, County specific Emergency Operation Plans, County Mass Casualty Plans and Protocols; Hospital specific Emergency Operation Plans; Hospital L1 and L2 Surge Plans

Analysis: In this complex MCI with burn injuries, the scope of the triage would be extensive. The IC/UC identified that a triage Group would use the Green, Yellow, Red, Black triage tag color code system to prioritize injured for treatment and transport. Patients will be triaged and treated at the scene at established casualty collection points until EMS has somewhere to take them. The IC/UC indicated red patients would be moved for hospital treatment first, while providing on scene treatment for green and yellow, and end of life care for black. MetroHealth Medical Center Burn Unit doctors can assist with triage via telephone with patients at the scene to make sure that they get to the right type of medical facility for their injuries.

The emphasis on the burn injuries during the exercise overshadowed the fact that patients are trauma patients and should be treated as such initially. Burn care is a specialty unit and depending on the situation, it is possible that not every patient that would by severity guidance, initially have a bed available based on capacity. Not all of the patients would be appropriate for burn bed and to assist with decompressing casualty collection point and then subsequent emergency departments, some patients would need to be admitted to burn surge and based hospitals initially. Burn injuries can be managed well for the first 72 hours outside of the burn center. Continuous evaluation and consultations with burn center physicians can assist greatly.

Existing plans that are used daily for patient management in the specialty areas. Large hospital systems use transfer centers to assist with patient movement daily. Organizations have existing surge plans for mass casualty incidents but the specialty patient populations require additional considerations. Processes and procedures outlined in the HCC Emergency Response Plan NEO and subsequent Annexes are designed to support and not supplant individual healthcare or agency's organizational emergency response plans and efforts. . This Annex develops non-traditional burn care resources to provide surge capacity and protect facilities with definitive burn care capacity from being overwhelmed through use of offsite triage and stabilization. The Burn Surge Annex provides tools, training materials and lists of SME that would assist BH and BSF with patient management for initial 24-72 hours.

Representatives of response agencies were well versed in their agency role and plan activation. Gaps existed in coordination of those agencies to manage a mass casualty incident including burn victims. Education on the Annex as mentioned previously on components of the plan will enhance multi-agency response coordination.

APPENDIX A: IMPROVEMENT PLAN (IP)

This IP has been developed specifically for NEO Healthcare Coalition and the participants identified in ***Appendix B*** as a result of the 2021 NEO HCC Burn Surge TTX conducted on 02/10/2021.

HPP Capability	Issue/Area for Improvement	Corrective Action	Capability Element	Primary Responsible Organization	Organization POC	Start Date	Target Completion Date
HPP Capability 1: Foundation for Health Care and Medical Readiness	1. Clarification on the role of State Burn Coordination Centers including levels of agency interface and expected areas of coverage.	1.1 Meet State Burn Committee to reevaluate SBCC role as written based on TTX feedback	Planning	The Center for Health Affairs and MetroHealth Medical Center	NEO RHC or designee and Emergency Manager	4/1/2021	9/1/2021
		1.2 Assess and refine the regional decision-making process used to identify a recipient hospital and transfer burn surge patients considering coordination of hospital system transfer centers.	Planning	Individual Hospitals	Emergency Manager/Safety Officer	4/1/2021	12/1/2021
		1.3 Review and update NEO Annex for clarity	Planning	The Center for Health Affairs	NEO RHC or designee	4/1/2021	9/1/2021
HPP Capability 2: Health Care and Medical Response Coordination	2. Education and awareness training on the existence of the regional annex and state burn plans and how they relate to facility surge and	2.1 Present Awareness Training to familiarize the regions MCI responders and Hospitals with the organization roles, notification process, and information needed	Training	The Center for Health Affairs	NEO RHC or designee	4/1/2021	9/1/2021

	county mass casualty plans.	to activate the Burn Surge Annex.					
		2.2 Post NEO Burn Surge Annex with regional plan on HCC website	Organization	The Center for Health Affairs	NEO Regional Healthcare Coalition Coordinator	4/1/2021	9/1/2021
HPP Capability 2: Health Care and Medical Response Coordination	3. Clarity on the flow of communication across response agencies along with tools and processes that would be used to maintain situational awareness.	3.1. Assess local MCI Plans to determine if the Notifications address the needs of a BMCI and identify EEI needed by their organization to maintain situational awareness.	Planning	Individual EMA and Responders	Planners, Chiefs	4/1/2021	12/1/2021
		3.2. Strengthen roles and responsibilities of updating OHTrac through biannual county drills and review of available JIT resources	Training	The Center for Health Affairs	NEO Regional Healthcare Coalition Coordinator	4/1/2021	4/1/2022
		3.3 Assess the feasibility of using cloud based sharable documents to maintain EEI that can be used in decision making for patient transfers.	Planning	Individual Hospitals	Emergency Manager/Safety Officer	4/1/2021	4/1/2022
		3.4 Review Local and regional MCI Plans to determine if the role of the PIO is adequately addressed.	Planning	Individual EMA and Responders	Planners, Chiefs	4/1/2021	4/1/2022

APPENDIX B: EXERCISE PARTICIPANTS

The following organizations participated in 2021 NEO HCC Burn Surge TTX conducted on 02/10/2021:

Participating Organizations			
Organization Name	**Organization Role**	**Organization Category**	**Number Participating**
Ashtabula County EMA	County Emergency Management	Local Government	2
Ashtabula County Health Department	Local Public Health	Local Government	2
Ashtabula County Medical Center	Base Hospital	Non-Government Partners	1
City of Cleveland Emergency Management	City Emergency Management	Local Government	1
Cleveland Clinic Hillcrest Hospital	Burn Surge Facility- Level 2 Trauma Center	Non-Government Partners	2
Cuyahoga County Board of Health	Local Public Health- Regional Public Health Coordinator	Local Government	1
Cuyahoga County Office Emergency Management	County Emergency Management	Local Government	1
Geauga Co EMA	County Emergency Management	Local Government	1
Geneva Fire Department	Local Fire Department	Local Government	1
Lake Health System	Base Hospitals & Free Standing Emergency Department	Non-Government Partners	6
Lorain County Public Health	Local Public Health	Local Government	1
Northwest Ambulance	Local Emergency Management Service	Local Government	1
Ohio Department of Health	State Public Health	State Government	6
Ohio Fire Emergency Response System	State EMS Support	State Government	1
South Central EMS	Local Emergency Management Service	Local Government	1
Southwest General Health Center	Burn Surge Facility – Evaluator EMS SME	Non-Government Partners	1
TetraTech	Exercise Design Consultant - Evaluators	Non-Government Partners	2
The Center for Health Affairs	Regional Healthcare Coordinator / Regional HCC Coordinator	Non-Government Partners	3
The MetroHealth System	Burn Center / Level 1 Trauma / Aeromedical	Non-Government Partners	10

Participating Organizations			
Organization Name	**Organization Role**	**Organization Category**	**Number Participating**
University Hospitals Geneva Medical Center	Base Hospital – Critical Access	Non-Government Partners	7
University Hospitals Transfer Center	Hospital Transfer Center	Non-Government Partners	1

APPENDIX C: EXERCISE VENUE SIGN IN SHEETS

The submitted venue sign in sheets that identify personnel that participated in 2021 NEO HCC Burn Surge TTX conducted on 02/10/2021 were collected to inform Appendix B, are secured for privacy and available on request.

APPENDIX D: ACRONYM LIST

The following is a complete list of acronyms utilized in the 2021 NEO HCC Burn Surge TTX After-Action Report/Improvement Plan:

Acronym	Meaning
A	Activity
AAR/IP	After-Action Report/Improvement Plan
ASPR	Office of the Assistant Secretary for Preparedness and Response
BH	Base Hospital
BMCI	Burn Mass Casualty Incident
BSF	Burn Surge Facility
EEI	Essential Elements Information
EM	Emergency Manager
EMA	Emergency Management Agency
EMS	Emergency Medical Services
EOP	Emergency Operation Plan
F	Function
FD	Fire Department
HCC	Health Care Coalition
HPP	Hospital Preparedness Program
IC	Incident Commander
IC/UC	Incident Command/Unified Command
ICS	Incident Command System
MARCS	Multi-Agency Radio Communication System
MCI	Mass Casualty Incident
NE	Northeast
NEO	Northeast Ohio
O	Objective
ODH	Ohio Department of Health
OHP	Office of Health Preparedness
OHP	Office of Health Preparedness
OPHCS	Ohio Public Health Communication System
OSU	Ohio State University Wexner Medical Center
PHEP	Public Health Emergency Preparedness
PIO	Public Information Officer
POC	Point of Contact

Acronym	Meaning
SBCC	State Burn Coordination Center
SFY	State Fiscal Year
SFY	State Fiscal Year
SME	Subject Matter Expert
T	Task
TTX	Table Top Exercise

APPENDIX E: EXERCISE ADDITIONAL DOCUMENTATION (OPTIONAL)

No documents were developed or generated from participants during the exercise.