



Knox/East Tennessee Healthcare Coalition
2019 Full Scale Exercise:
The Great Quake of 2019 (Earthquake)
Regional Surge Event

Exercise Plan/Participant Guide/Controller and
Evaluator Handbook
May 10, 2019

EXERCISE OVERVIEW

Exercise Name	KET HC 2019FSE: The Great Shake of 2019
Exercise Dates	May 10, 2019
Scope	This exercise is a full-scale exercise planned for healthcare facilities and community partners/organizations within the Knox/East Tennessee Healthcare Coalition’s jurisdiction. Exercise play is limited to the parameters set forth within each participating organization.
Mission Area(s)	Response and Recovery
Core Capabilities	HPP Capabilities 1: (Foundation for Health Care and Medical Readiness), 2 (Health Care and Medical Response Coordination), 3 (Continuity of Health Care Service Delivery), 4 (Medical Surge)
Objectives	<p>Evacuation Objectives:</p> <ol style="list-style-type: none"> 1. Evaluate participating organizations ability to process a surge of patients. 2. Demonstrate participating organizations ability to coordinate with outside agencies. 3. Evaluate participating organizations ability to identify resources and methods of requesting additional resources. 4. Assess use of the Incident Command system to manage the incident using appropriate ICS forms. 5. Evaluate the ability of participating organizations and the Coalition to enhance situational awareness during an event and effectively communicate through appropriate and redundant channels. 6. Evaluate the ability of the Coalition to demonstrate resource support and coordination among members under time urgency, uncertainty, and logistical constraints of an emergency.
Threat or Hazard	Natural Disaster – Earthquake along the East Tennessee Seismic Zone requiring evacuation of region level 1 Trauma Center, University of Tennessee Medical Center, Peninsula Hospital and widespread surge of patients.

Exercise Name	KET HC 2019FSE: The Great Shake of 2019	
Scenario	<p>On May 10, 2019, approximately 8:45 a.m., an earthquake occurs along the East Tennessee Seismic Zone. Modified Mercalli intensity scale (MM Scale) VIII or greater intensity ground shaking extends throughout large sections of the area East Tennessee, greatly impacting the region. The area within 25 miles of the fault is subjected to shaking of MM intensity VIII or greater, strong enough to cause considerable damage to ordinary buildings and great damage to poorly built structures. Soil liquefaction occurs in some areas and adds to the destruction, since even earthquake resistant structures may fail when liquefaction occurs. There is a regional surge of patients to local healthcare facilities due to the event.</p> <p>At 9:00 a.m., Peninsula Hospital issues notification of forced evacuation due to extensive structural damage.</p> <p>At 10:15 a.m., the initial shock is followed by a 3.2 magnitude earthquake that causes further damage, forcing the evacuation of University of Tennessee Medical Center, the EMS Region II Level 1 trauma center.</p>	
Sponsor	Knox/East Tennessee Healthcare Coalition	
Participating Organizations	Region-wide hospitals, long term care, dialysis clinics, healthcare clinics, public health, RMCC (Regional Medical Communication Center), EMS, EMA, Forensic Center, Blood Bank and other appropriate partners	
Point of Contact	<p>John Brinkley Knox County Health Department 140 Dameron Avenue Knoxville, TN 37917 (865) 215-5456 John.brinkley@knoxcounty.org</p>	<p>Wanda Roberts East TN Regional Health Office 2101 Medical Center Way Knoxville, TN 37920 (865) 549-5294 Etrhc.health@tn.gov</p>

GENERAL INFORMATION

Exercise Objectives and Core Capabilities

The following exercise objectives in Table 1 describe the expected outcomes for the exercise. The objectives are linked to core capabilities, which are distinct critical elements necessary to achieve the specific mission area(s). The objectives and aligned core capabilities are guided by elected and appointed officials and selected by the Exercise Planning Team.

Exercise Objective	HPP Core Capability	Objective	Activity (If Applicable)
Evaluate participating organizations ability to process a surge of patients.	4 Medical Surge	2 Respond to a Medical Surge	1 Implement Emergency Department and Inpatient Medical Surge Response 2 Implement Out of Hospital Medical Surge Response 4 Provide Pediatric Care During a Medical Surge Response 6 Provide Burn Care During a Medical Surge Response 7 Provide Trauma Care During a Medical Surge Response 8 Respond to Behavioral Health Needs During a Medical Surge Response 11 Manage Mass Fatalities

Exercise Objective	HPP Core Capability	Objective	Activity (If Applicable)
Demonstrate participating organizations ability to coordinate with outside agencies.	1 Foundation for Health Care and Medical Readiness	4 Train and Prepare the Healthcare and Medical Workforce	3 Plan and Conduct Coordinated Exercise With Healthcare Coalition Members and Other Response Organizations
Evaluate participating organizations ability to identify resources and methods of requesting additional resources.	1 Foundation for Health Care and Medical Readiness	4 Train and Prepare the Healthcare and Medical Workforce	1 Promote Role Appropriate National Incident Management System Implementation
	4 Medical Surge	2 Respond to a Medical Surge	
Assess use of the Incident Command system to manage the incident using appropriate ICS forms.	1 Foundation for Health Care and Medical Readiness	4 Train and Prepare the Healthcare and Medical Workforce	1 Promote Role Appropriate National Incident Management System Implementation
Evaluate the ability of participating organizations and the Coalition to enhance situational awareness during an event and effectively communicate through appropriate and redundant channels.	1 Foundation for Health Care and Medical Readiness	1 Establish and Operationalize the Health Care Coalition	
	2 Health Care and Medical Response Coordination	2 Utilize Information Sharing Procedures and Platforms	

Exercise Objective	HPP Core Capability	Objective	Activity (If Applicable)
<p>Evaluate the ability of the Coalition to demonstrate resource support and coordination among members under time urgency, uncertainty, and logistical constraints of an emergency.</p>	<p>1 Foundation for Health Care and Medical Readiness</p>	<p>2 Identify Risk and Needs</p>	<p>4 Assess Community Planning for Children, Pregnant Women, Seniors, Individuals with Access and Functional Needs, Including People with Disabilities, and Others with Unique Needs</p>
		<p>4 Train and Prepare the Healthcare and Medical Workforce</p>	<p>2 Educate and Train on Identified Preparedness and Response Gaps</p> <p>3 Plan and Conduct Coordinated Exercise With Healthcare Coalition Members and Other Response Organizations</p>
	<p>3 Continuity of Healthcare Service Delivery</p>	<p>1 Identify Essential Functions for Health Care Delivery</p>	
	<p>4 Medical Surge</p>	<p>2 Respond to a Medical Surge</p>	

Table 1. Exercise Objectives and Associated Core Capabilities

Participant Roles and Responsibilities

The term *participant* encompasses many groups of people, not just those playing in the exercise. Groups of participants involved in the exercise, and their respective roles and responsibilities, are as follows:

- **Players.** Players are personnel who have an active role in discussing or performing their regular roles and responsibilities during the exercise. Players discuss or initiate actions in response to the simulated emergency.
- **Controllers.** Controllers plan and manage exercise play, set up and operate the exercise site, and act in the roles of organizations or individuals that are not playing in the exercise. Controllers direct the pace of the exercise, provide key data to players, and may prompt or initiate certain player actions to ensure exercise continuity. In addition, they issue exercise material to players as required, monitor the exercise timeline, and supervise the safety of all exercise participants.
- **Simulators.** Simulators are control staff personnel who role play nonparticipating organizations or individuals. They most often operate out of the Simulation Cell (SimCell), but they may occasionally have face-to-face contact with players. Simulators function semi-independently under the supervision of SimCell controllers, enacting roles (e.g., media reporters or next of kin) in accordance with instructions provided in the Master Scenario Events List (MSEL). All simulators are ultimately accountable to the Exercise Director and Senior Controller.
- **Evaluators.** Evaluators evaluate and provide feedback on a designated functional area of the exercise. Evaluators observe and document performance against established capability targets and critical tasks, in accordance with the Exercise Evaluation Guides (EEGs).
- **Actors.** Actors simulate specific roles during exercise play, typically victims or other bystanders.
- **Observers.** Observers visit or view selected segments of the exercise. Observers do not play in the exercise, nor do they perform any control or evaluation functions. Observers view the exercise from a designated observation area and must remain within the observation area during the exercise. Very Important Persons (VIPs) are also observers, but they frequently are grouped separately.
- **Media Personnel.** KCHD Community Relations staff will work with the coalition to produce a media package on the day of the exercise. There will be no open media invitations during the event.

- **Support Staff.** The exercise support staff includes individuals who perform administrative and logistical support tasks during the exercise (e.g., registration, catering).

Exercise Assumptions and Artificialities

In any exercise, assumptions and artificialities may be necessary to complete play in the time allotted and/or account for logistical limitations. Exercise participants should accept that assumptions and artificialities are inherent in any exercise, and should not allow these considerations to negatively impact their participation.

Assumptions

Assumptions constitute the implied factual foundation for the exercise and, as such, are assumed to be present before the exercise starts. The following assumptions apply to the exercise:

- The exercise is conducted in a no-fault learning environment wherein capabilities, plans, systems, and processes will be evaluated.
- The exercise scenario is plausible, and events occur as they are presented.
- Exercise simulation contains sufficient detail to allow players to react to information and situations as they are presented as if the simulated incident were real.
- Participating agencies may need to balance exercise play with real-world emergencies. Real-world emergencies take priority.

Artificialities

During this exercise, the following artificialities apply:

- Exercise communication and coordination is limited to participating exercise organizations and venues.

EXERCISE LOGISTICS

Safety

Exercise participant safety takes priority over exercise events. The following general requirements apply to the exercise:

- A Safety Controller is responsible for participant safety; any safety concerns must be immediately reported to the Safety Controller. The Safety Controller and Exercise Director will determine if a real-world emergency warrants a pause in exercise play and when exercise play can be resumed.
- For an emergency that requires assistance, use the phrase **“real-world emergency.”** The following procedures should be used in case of a real emergency during the exercise:
 - Anyone who observes a participant who is seriously ill or injured will immediately notify emergency services and the closest controller, and, within reason and training, render aid.
 - The controller aware of a real emergency will initiate the **“real-world emergency”** broadcast and provide the Safety Controller, Senior Controller, and Exercise Director with the location of the emergency and resources needed, if any.

POST-EXERCISE AND EVALUATION ACTIVITIES

Debriefings

Post-exercise debriefings aim to collect sufficient relevant data to support effective evaluation and improvement planning.

Hot Wash

At the conclusion of exercise play, controllers facilitate a Hot Wash to allow players to discuss strengths and areas for improvement, and evaluators to seek clarification regarding player actions and decision-making processes. All participants may attend; however, observers are not encouraged to attend the meeting. The Hot Wash should not exceed 30 minutes.

Controller and Evaluator Debriefing

Controllers and evaluators attend a facilitated C/E Debriefing immediately following the exercise. During this debriefing, controllers and evaluators provide an overview of their observed functional areas and discuss strengths and areas for improvement.

Participant Feedback Forms

Participant Feedback Forms provide players with the opportunity to comment candidly on exercise activities and exercise design. Participant Feedback Forms should be collected at the conclusion of the Hot Wash.

Evaluation

Exercise Evaluation Guides

EEGs assist evaluators in collecting relevant exercise observations. EEGs document exercise objectives and aligned core capabilities, capability targets, and critical tasks. Each EEG provides evaluators with information on what they should expect to see demonstrated in their functional area. The EEGs, coupled with Participant Feedback Forms and Hot Wash notes, are used to evaluate the exercise and compile the After-Action Report (AAR).

After-Action Report

The AAR summarizes key information related to evaluation. The AAR primarily focuses on the analysis of core capabilities, including capability performance, strengths, and areas for improvement. AARs also include basic exercise information, including the exercise name, type of exercise, dates, location, participating organizations, mission area(s), specific threat or hazard, a brief scenario description, and the name of the exercise sponsor and POC.

Improvement Planning

Improvement planning is the process by which the observations recorded in the AAR are resolved through development of concrete corrective actions, which are prioritized and tracked as a part of a continuous corrective action program.

After-Action Meeting

The After-Action Meeting (AAM) is a meeting held among decision- and policy-makers from the exercising organizations, as well as the Lead Evaluator and members of the Exercise Planning Team, to debrief the exercise and to review and refine the draft AAR and Improvement Plan (IP). The AAM should be an interactive session, providing attendees the opportunity to discuss and validate the observations and corrective actions in the draft AAR/IP.

Improvement Plan

The IP identifies specific corrective actions, assigns them to responsible parties, and establishes target dates for their completion. It is created by elected and appointed officials from the organizations participating in the exercise, and discussed and validated during the AAM.

PARTICIPANT INFORMATION AND GUIDANCE

Exercise Rules

The following general rules govern exercise play:

- Real-world emergency actions take priority over exercise actions.
- Exercise players will comply with real-world emergency procedures, unless otherwise directed by the control staff.
- All communications (including written, radio, telephone, and e-mail) during the exercise will begin and end with the statement “**This is an exercise.**”
- Exercise players who place telephone calls or initiate radio communication with the SimCell (if applicable) must identify the organization or individual with whom they wish to speak.

Players Instructions

Players should follow certain guidelines before, during, and after the exercise to ensure a safe and effective exercise.

Before the Exercise

- Review appropriate organizational plans, procedures, and exercise support documents.
- Be at the appropriate site at least 30 minutes before the exercise starts. Wear the appropriate uniform and/or identification item(s).
- Sign in when you arrive.
- If you gain knowledge of the scenario before the exercise, notify a controller so that appropriate actions can be taken to ensure a valid evaluation.

During the Exercise

- Respond to exercise events and information as if the emergency were real, unless otherwise directed by an exercise controller.
- Controllers will give you only information they are specifically directed to disseminate. You are expected to obtain other necessary information through existing emergency information channels.
- Do not engage in personal conversations with controllers, evaluators, observers, or media personnel. If you are asked an exercise-related question, give a short, concise answer. If you are busy and cannot immediately respond, indicate that, but report back with an answer as soon as possible.
- If you do not understand the scope of the exercise, or if you are uncertain about an organization’s participation in an exercise, ask a controller.

- Parts of the scenario may seem implausible. Recognize that the exercise has objectives to satisfy and may require incorporation of unrealistic aspects. Every effort has been made by the exercise’s trusted agents to balance realism with safety and to create an effective learning and evaluation environment.
- All exercise communications will begin and end with the statement “This is an exercise.” This precaution is taken so that anyone who overhears the conversation will not mistake exercise play for a real-world emergency.
- When you communicate with the SimCell (if applicable), identify the organization or individual with whom you wish to speak.
- Speak when you take an action. This procedure will ensure that evaluators are aware of critical actions as they occur.
- Maintain a log of your activities. Many times, this log may include documentation of activities that were missed by a controller or evaluator.

After the Exercise

- Participate in the Hot Wash at your venue with controllers and evaluators.
- Complete the Participant Feedback Form. This form allows you to comment candidly on emergency response activities and exercise effectiveness. Provide the completed form to a controller or evaluator.
- Provide any notes or materials generated from the exercise to your controller or evaluator for review and inclusion in the AAR.

Simulation Guidelines

Because the exercise is of limited duration and scope, certain details will be simulated. The physical description of what would fully occur at the incident sites and surrounding areas will be relayed to players by simulators or controllers. A SimCell (if applicable) will simulate the roles and interactions of nonparticipating organizations or individuals. The East Tennessee Regional Health Office will man the SimCell (if applicable) for all public health related communications for the East Region and Knox County participants.

Appendix A: Exercise Schedule

May 07 th , 2019	Personnel	Activity	Location
May 07, 2019 at 1300	Controller/Evaluators	Controller/Evaluator Meeting	KCHD

May 10 th 2019	Personnel	Activity	Location
0830 to 1230	All Players, controllers, evaluators	Surge/Evacuation Event	All participating agencies.
0845	All participating organizations	Earthquake hits in Blount County near Knox County Line	All participation agencies
0900 – 1210	All participating organizations	Participating Emergency departments start receiving victims.	All participation agencies
0900	All participating organizations	Peninsula Hospital announces the need to evacuate their facility	All participating organizations
1015	All participation agencies	After Shock hits area	All participation agencies
1030	All participation agencies	University Medical Center announces the need to evacuate their facility	All participation agencies
1210	All participation agencies	END OF EXERCISE	All participation agencies
May 16 th , 2019	Personnel	Activity	Location
May 16, 2019	Organizational controllers, evaluators/ emergency managers	Regional Hot wash	Knox County Health Department

Appendix B: Exercise Participants

Participating Organizations
Coalition Member Type
Federal
State
Tennessee Department of Health- Central Office
Tennessee Department of Health- East Region
County
Knox County Health Department
Knox County Emergency Management Agency
Healthcare Facility- Hospital
Big South Fork Medical Center
Blount Memorial Hospital
Claiborne County Hospital
East Tennessee Children’s Hospital
Fort Loudoun Medical Center
Fort Sanders Regional Medical Center
Jefferson Memorial Hospital
LaFollette Medical Center
LeConte Medical Center
Methodist Medical Center
Morristown Hamblen Healthcare
Newport Medical Center
North Knoxville Medical Center
Parkwest Medical Center
Peninsula Psychiatric Hospital
Roane Medical Center
Sweetwater Hospital Association
Turkey Creek Medical Center
University of Tennessee Medical Center

Healthcare Facility- Long Term Care
Asbury Place
Ben Atchley State Veterans Home
Beverly Park Place Health and Rehab
Concordia Transitional Care and Rehabilitation-Maryville
Cumberland Village Center
Diversicare of Claiborne
Diversicare of Oak Ridge
Fort Sanders Sevier Nursing Home
Fort Sanders Transitional Care Unit
Harriman Care & Rehabilitation Center
Heritage Center
Holston Health Care
Huntsville Manor
Island Home Park Health and Rehabilitation
Jefferson City Health and Rehabilitation Center
Life Care Center of Jefferson City
Life Care Center of Morristown
NHC HealthCare Knoxville
NHC HealthCare Oak Ridge
NHC Place Farragut
Norris Health and Rehabilitation Center
Oneida Nursing and Rehab Center
Raintree Terrace senior living
Serene Manor Medical Center
Shannondale of Knoxville
Signature HealthCARE of Rockwood Rehab & Wellness Center
Summit View of Rocky Top
Summitview of Farragut
Tri State Health & Rehabilitation Center
Trinity Health and Rehabilitation Center
West Hills Health and Rehab
Westmoreland Health & Rehab
Asbury Place
Ben Atchley State Veterans Home

Beverly Park Place Health and Rehab
Healthcare Facility- Home Health/Hospice
Amedisys Home Health
Amedisys Home Health- Harriman
Amedisys Home Health Newport
Amedisys Home Health of Jefferson City
Amedisys Home Health Sevierville
Amedisys Home Health/Knoxville
Amedisys Hospice Knoxville
Amedisys Hospice Sweetwater
Avalon Hospice
Clinch River Home Health
Covenant HomeCare
Interim Home Health of East TN
Intrepid Home Health
Morristown Amedisys Home Health
NHC Home Care Knoxville
Smoky Mountain Home Health and Hospice
SunCrest Home Health
The University of Tennessee Medical Center Hospice Services
University of Tennessee Home Care
UT Hospice Knoxville
Healthcare Facility- Ancillary/Outpatient/FQHC/Rural Health Clinics
Community Health of East Tennessee, Inc.
Kingston Family Practice,CMG
Knoxville Orthopedic Surgery Center
Pain Consultants of East Tennessee Surgery Center
Parkwest Surgery Center
PHYSICIANS SURGERY CENTER OF KNOXVILLE
RURAL MEDICAL SERVICES INC.
Smoky Mountain Ambulatory Surgery Center, LLC
Tennessee Endoscopy Center
Tennessee Valley Eye Center

The Endoscopy Center Main
The Endoscopy Center North
The Endoscopy Center West
The Eye Surgery Center of East Tennessee
The Eye Surgery Center of Knoxville
The Eye Surgery Center of Oak Ridge, LLC
Wartburg Surgery Center
Healthcare Facility- Dialysis
Davita Appalachian Dialysis
Davita Clinch River Dialysis
DaVita Knoxville Dialysis
Davita Morristown Dialysis
Davita Rocky Top Dialysis
Dialysis Clinic Inc - Holston River
Dialysis Clinic Inc - Maryville
Dialysis Clinic Inc. Knoxville
Dialysis Clinic Inc--Caryville
FKC Powell Dialysis
Fresenius Dialysis West
Fresenius Kidney Care Caryville
Fresenius Kidney Care Fort Sanders
Fresenius Kidney Care Morristown
Fresenius Kidney Care- New Market
Fresenius Kidney Care Oak Ridge
Fresenius Kidney Care Roane County
Fresenius Kidney Care Sevierville
Fresenius Kidney Care Skyway
Fresenius Kidney Care-Newport
Fresenius Kidney Care- Loudon
Fresenius Medical Care East Knoxville
Fresenius Medical Care Lafollette
Fresenius Parkwest Home Therapy
North Knoxville Fresenius

EMS/Medical Transport
AMR Blount County
AMR Knox County
Other Coalition Partners
Regional Medical Communications Center
Ballplay Volunteer Fire Department
Other Partners
Remote Area Medical
Wonder Works “Earthquake Café”

Appendix C: Acronyms

Acronym	Term
AAR	After Action Report
ALT	Assisted Living Facility
ASC	Ambulatory Surgical Center
ASPR	Assistant Secretary for Preparedness and Response
DHS	U.S. Department of Homeland Security
EMA	Emergency Management Agency
EMS	Emergency Medical Services
ETRO	East TN Regional Office (Tennessee Department of Health)
FQHC	Federally Qualified Health Center
FSE	Full Scale Exercise
HHA	Home Health
HICS	Hospital Incident Command System
HPP	Hospital Preparedness Program
HSEEP	Homeland Security Exercise and Evaluation Program
IAP	Incident Action Plan
ICF/IID	Intermediate Care Facilities for Individuals with Intellectual Disability
ICS	Incident Command System
IP	Improvement Plan
KCHD	Knox County Health Department
KETHC	Knox/East TN Healthcare Coalition
LTC	Long Term Care
OPT-SLP	Rehabilitation Agencies, Clinics and Public Health Agencies as Providers of Outpatient Physical Therapy and Speech-Language Pathology Services
PHEP	Public Health Emergency Preparedness
POC	Point of Contact
SIMCELL	Simulation Cell
SME	Subject Matter Expert
SNF	Skilled Nursing Facility
SNF/LTC	Skilled Nursing Facility/Long Term Care
UTMC	University of Tennessee Medical Center