CVHC
CENTRAL VIRGINIA HEALTHCARE COALITION

2019 Exercise Series:

"Extreme Heat Table Top Exercise"

Situation Manual (SITMAN)

February 26th, 2019 0830-1130: Dinwiddie Enhancement Center

EXERCISE OVERVIEW

Exercise Name	2019 CVHC Exercise Series: Extreme Heat Table Top Exercise
Exercise Dates	February 26th, 2019: 0830-1130: Dinwiddie Enhancement Center
Scope	This exercise is a Tabletop Exercise planned for 3 hours. Exercise play is limited to participating agencies and information provided in the Situation Manual.
Mission Area(s)	Protection, Mitigation, Response, and Recovery
Core Capabilities	• Healthcare and Medical Response Coordination • Medical Surge • Continuity of Healthcare Service Delivery
Objectives	• Identify and Coordinate Resource Needs during an Emergency • Communicate with Healthcare Providers, Non-Clinical Staff, Patients, Family Members during an Emergency • Identify Essential Functions for Healthcare Delivery • Plan for Continuity of Operations • Maintain Access to Non-Personnel Resources during an Emergency • Protect Responders' Safety and Health • Respond to a Medical Surge • Plan for and Coordinate Healthcare Evacuation and Relocation
Threat or Hazard	Natural event: Temperature Extremes (Heat Related)
Scenario	Extreme heat wave with 36 hours of notice will affect the entire mid-Atlantic region for an extended period of time. Cascading impacts from the heatwave will cause broad healthcare delivery system challenges.
Sponsor	Central Virginia Healthcare Coalition

Participating Organizations	This tabletop exercise is designed for members of the staff in participating facilities who would be responsible for activating the facility's Emergency Operations Plan and staffing the facility's Emergency Command Center utilizing incident management policies and procedures. A full listing of participating healthcare systems and response partners can be found in the attached exercise documentation.
Point of Contact	Pete Svoboda Medically Vulnerable Populations Coordinator Central Virginia Healthcare Coalition E-Mail: pete.svoboda@central-region.org Phone: 804-839-5074 Erin Nowlin Preparedness and Training Coordinator Central Virginia Healthcare Coalition E-Mail: erin.nowlin@central-region.org Phone: 804-512-4697

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	Core Capability
Discuss a severe heatwave scenario to determine how your facility would prepare, paying special attention to your emergency response plan, capabilities, and staff responsibilities.	Health and Social Services
Identify the strengths and weaknesses in your plans for activation of facility-based emergency operations in response to an extreme heatwave event. Points of focus include administrative, clinical and plant engineering as well as communication with community-based agencies.	Health and Social Services
Identify and understand the secondary effects of a large-scale, wide-spread extreme heat related event paying close attention to planning and logistics over multiple operational periods.	Health and Social Services

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).
- **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.
- **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 affect their participation. During this exercise, the following apply:

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.
- Decisions are not precedent setting and may not reflect any organizations final position.
- Time lapses are artificially used to achieve the exercise objectives.

Artificialities

During this exercise, the following artificialities apply:

- Exercise communication and coordination is limited to participating exercise organizations, venues, and the Regional Healthcare Coordination Center.

Exercise Rules

This is intended to be a safe, open environment. The problems and challenges are real and there is no "textbook" solution. The following exercise ground rules have been developed to ensure that the goals and objectives are met in a reasonable amount of time and the Tabletop Exercise (TTX) runs smoothly:

- This exercise will be held in an open, low stress, no fault environment. Varying viewpoints, even disagreements, are expected.
- Respond to the scenario using your knowledge of current plans and capabilities (i.e., you may use only existing assets) and insights derived from your training.
- Decisions are not precedent setting and may not reflect your organization's final position on a given issue. This exercise is an opportunity to discuss and present multiple options and possible solutions.
- Issue identification is not as valuable as suggestions and recommended actions that could improve mission area efforts. Problem solving efforts should be the focus, but do not allow issues to dominate so that progress is not hindered. If needed, add those issues to the "parking lot".
- Keep the exercise's objectives in mind throughout the exercise.
- Treat the scenario incidents as real events and play your appropriate role.
- Participate openly and focus discussions on appropriate topics – asking questions, sharing thoughts, and offering forward looking, problem solving suggestions are strongly encouraged, as these will enhance the exercise experience and planning efforts.
- Keep your comments focused and consider time constraints.
- Respect the observations, opinions, and perspectives of others, as the discussions will explore a variety of policies, decisions, actions, and key relevant issues from different sources.
- Participate in discussions on the issues and procedures flowing from each move presented.
- Exercise controllers and facilitators as needed will convey additional rules for the exercise as needed.

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, a facilitated Hot Wash will 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.

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.

EXERCISE SCHEDULE

February 26, 2019

Time	Activity
0830-0850	Welcome and Exercise Briefing
0850-0945	Module One
0945-0955	Break
0955-1015	Module Two
1015-1025	Break
1025-1100	Module Three
1100-1130	Debrief & Hotwash

Rationale:
"Extreme Heat often results in the highest number of annual deaths among all weather-related hazards," (www.Ready.gov, 2018). In most regions of the United States, extreme heat is defined as a multi-day period of high heat and humidity with temperatures above 90 degrees. In extreme heat, due to slowed evaporation, the body must work extra hard to maintain a normal temperature. This can lead to extreme health risks and/or death. Extreme temperatures also increase the demand on public utilities and facility or home utility systems to perform under harsh conditions, leading to a higher potential for failure of these systems. Temperature extremes are also ranked in the Top 10 hazards/threats for healthcare organizations in the regional hazard vulnerability analysis (HVA) for Central Virginia in FY 2019.

MODULE 1

Monday 1000 hrs.: High temperatures for the last 3 days have been greater than 95* F across the region, with heat indices as high as 103* F. The National Weather Service in Wakefield, VA has just issued an Excessive Heat Watch and is reporting that an impending extreme heat and high humidity event centered in the North East and expanding over much of the United Sates will begin tomorrow, and continue through Friday. Central Virginia is amongst one of the highest threat areas for increased humidity during the heatwave, with forecast heat indices in excess of 110* F.

While exact impacts over the next week remain unknown, local jurisdictions are beginning to open 24-hour cooling shelters, and Dominion Energy is warning of the potential for intermittent power outages due to unprecedented demand on the region's electrical grid. Hospital emergency departments and EMS agencies around the region are already seeing a significant increase in patients presenting with heat-related illnesses.

Mod 1

QUESTIONS

Hospice, Home Health and Dialysis

1. What outreach procedures have you established for your clients/patients?
2. Do you provide any information and warning materials to them?
3. If they lose power or they have a loss of air conditioning what is the plan to coordinate services?
4. What about access to cooling centers? Are they able to accommodate your population?
5. What if the patient needs to be evacuated due to the effects of the heat?
6. Does the schedule of visits change due to the weather?
7. Does their care plan change? If so, what are the changes?
8. Does the local emergency management agency need to be kept informed? If so, how would you manage that communications?
9. Do you have mechanisms in place to track patient if they leave their home?
10. How will you activate and utilize the Incident Command System during a heat wave?

Long Term Care

1. What precautions need to be taken during the heat wave to protect your residents? staff?
2. What vendors would need to be contacted to ensure positive supply chain management during the heat wave?
3. What will you do if your facility losses air conditioning capability? What resources would you need? Who should you contact for support?
4. How would the incident command system help you to manage the heat wave at your facility?
5. What if any procedures does your facility have in place to address a heat wave?
6. What would your facility do to accomplish an evacuation due to a system failure (air conditioning, power/backup power generation)?

Acute Care / Hospitals

1. How will this affect your organization from an administrative standpoint? Clinical standpoint?
2. How and where do you establish your command center to activate your Emergency Operations Plan?
3. What are you communicating with staff, patients, residents, families, volunteers?
4. How is this communication taking place?
5. What are your related plans or annexes in use now?
6. What facility concerns do you have now?
7. What are current policies and procedures concerning personal preparedness for your critical staff?
8. How will you continue to provide care to your patients if your primary business location is impacted?
9. What are your procedures for heat related events?
10. What are your triggers for implementation of these procedures?
11. What are your policies for staff scheduling in this situation?
12. Who's responsible for communications, supplies, staffing, clinical decisions, etc.?

MODULE 2

Wednesday 1300 hrs.: An excessive heat warning has been in effect since 0700 hrs. yesterday. The region has experienced extreme heat with high temperatures exceeding the original forecast. The majority of the region marked in at greater than 105* F and 85% humidity during sunlight hours. Today's heat index in the city of Richmond will approach 115* F and will not fall below 100* F until after 2100 hrs. tonight.

Governor Ralph Northam has declared a state of emergency and has activated the National Guard to assist localities with dispensing of water and ice to the community. With over 50 heat-related fatalities reported by the Office of the Chief Medical Examiner in the last 24 hours, the Commissioner of the Virginia Department of health has declared a Public Health Emergency in Virginia. Cooling shelters around the region have reached capacity. Schools have been closed for the remainder of the week, and local government officials are urging cancelation of all unnecessary outdoor activity and travel. GRTC has cancelled all bus service in the metro-Richmond area for the next two days.

A 12PM Situation Report from the Regional Healthcare Coordination Center (RHCC) reveals the following:

- Healthcare organizations across the region are reporting a 20% staff absenteeism rate, presumably due to school closures and dangerous conditions outside.
- Hospital emergency departments are overwhelmed with patients complaining of heat-related illnesses, with 4 hospitals in the region reporting full EMS diversion in VHASS. Owens & Minor and HealthTrust are reporting difficulty filling hospital supply chain orders for IV Fluids.
- Long Term Care facilities are having difficulty maintaining acceptable temperatures in resident rooms located near the periphery and higher floors of their buildings. Multiple LTC facilities have initiated horizontal resident evacuations to interior common spaces where the temperature can be better regulated.
- Dialysis clinics are reporting alarming levels of client absenteeism during the heat of the day. Non-emergency medical transportation providers have had difficulty keeping vans operational during the heatwave. Clients who are able to travel have overwhelmingly reported concerns for their safety during the worst of the heat in the afternoon hours.
- Some ambulatory surgery centers and other outpatient care providers have been forced to cancel elective procedures due to clinical supply chain interruptions and difficulty maintaining acceptable temperatures in procedure areas.
- In-home care providers, including hospice & home health organizations, are having difficulty reaching patients on the phone. Localities have sporadically reported that these patient populations appear to be presenting in shelters. Some clinical staff, fearing for their safety, have refused to travel during the heat of the day.

Mod 2
QUESTIONS

1. What are your immediate actions, concerns and priorities for:
    a. Administration
    b. Clinical
    c. Plant Operations
2. Have you activated your EOP? Describe your command structure.
3. What is your resource burn rate for critical resources (food, water, meds, linens, staff, generator fuel)?
4. How are you communicating with staff, patients, patients' families, the public? What is your messaging? Are you participating in regional situation reports?
5. What is the importance of providing/acquiring a regional status report?
6. Have you been able to communicate with vendors that provide critical supplies? What issues do you potentially have to address regarding this issue?

MODULE 3

Thursday 1600 hrs: An Excessive Heat Warning remains in effect for the entire region until 9AM on Saturday, when a much-needed cold front is expected to cross the mid-Atlantic United States. Despite this forecasted reprieve over the weekend, unprecedented demand on the electrical grid has begun to cause intermittent commercial power failures across the metro-area.

Thursday 1800 hrs.: While most power lapses at healthcare facilities appear to be sporadic and short-lived, the Regional Healthcare Coordination Center (RHCC) distributes a regional alert at 6PM after receiving notification from Dominion Energy that repeated blackouts in South Richmond have caused catastrophic damage to the electrical grid in that area. Most concerningly, Metro Memorial Hospital (a 300 bed Level II Trauma Center) and Golden Years Health & Rehab (a 140 bed Skilled Nursing Facility) in south Richmond notify the RHCC that their backup generators do not support their facilities' HVAC systems.

Friday 0700 hrs.: After investigating the electrical grid damage overnight, Dominion Power estimates that it will take an additional 24 hours to complete repairs to the affected areas in South Richmond. At 0730 hrs., administrators at Metro Memorial Hospital and Golden Years Health & Rehab place an emergency call to the RHCC Activation Hotline and notify the RHCC of their intent to fully evacuate their facilities, citing rising temperatures on patient floors and the extended timeline for power restoration. The RHCC alerts hospitals and LTC facilities in the region to prepare for immediate patient/resident surge.

Friday 0900 hrs.: Intermittent power failures and decreased metro water pressure supply begin to impact community dialysis clinics, causing mayhem on the operations of clinics without backup generators.

In addition to the surge impacts from the evacuation at Golden Years, repeated commercial power failures at LTC facilities have interrupted access to residents' electronic health records due to server damage.

Hospice & Home Health agencies have growing concerns about the welfare of patients in the community who live in areas impacted by the intermittent blackouts. Even brief loss of air-conditioning is dangerous for these patient populations. Some home health agencies are being asked to provide care for their clients in non-traditional settings such as community shelters.

Most outpatient care centers have been forced to completely close until the blackout resolve.

Mod 3
QUESTIONS

1. What are your immediate actions, concerns and priorities for administration, clinical, plant operations leadership?
2. How have you handled multiple operational periods?

Due to structural damage at your primary location:

You must internally relocate 10% of your residents because their rooms have been rendered uninhabitable.

3. Describe your plans for this internal surge from an administrative, clinical, and plant operations standpoint.
4. How long will this take?
5. What would long-term plan look like?

6. What external relationships do you have with similar facilities, local emergency management professionals, corporate structures, or the healthcare coalition to assist you in an incident such as this?

Appendix A: Exercise Participants

To be compiled from attendance sheets at completion of exercise

Appendix B: Acronyms

Acronym	Term
RHCC	Regional Healthcare Coordination Center
EOP	Emergency Operations Plan
HVA	Hazard Vulnerability Analysis
VDH	Virginia Department of Health
DEM	Virginia Department of Emergency Management
VDOT	Virginia Department of Transportation
AAR	After Action Report
CVHC	Central Virginia Healthcare Coalition

Appendix C: AAR Documentation

Instructions

Complete the following sections with information specific to your facility.
This is NOT your final AAR document. Central Virginia Healthcare Coalition will send you an AAR with details specific to this exercise. You will be responsible for inputting the facility-specific info from below into the AAR when you receive it.

What was supposed to happen:

(In an ideal situation, how would your facility have handled this scenario?)

What actually occurred:

(Compared to ideal, what were you actually able to do?)

What we did well:

What we need to improve:

(Select the most important 3-5 items)

Plan for improvement:

(For each area of improvement from above, who will address and on what timeline?)