

Dr. Evil's Revenge: CyberSizzle Controller Handbook

Coconino County Health and Human Services, Arizona

National Association of City and County Health Officials Preparedness Summit

May 1, 2025

The Controller Handbook describes the roles and responsibilities of exercise controllers and evaluators, and the procedures they should follow. Because the Handbook contains information about the scenario and about exercise administration, it is distributed to only those individuals specifically designated as controllers; it should not be provided to exercise players.

Exercise Overview

Exercise Name	Dr. Evil's Climate Caper: A Disaster and Cyber-Attack Game	
Exercise Date, Time, and Location	May 1, 2025 8:00 AM – 11:30 AM Preparedness Summit, Texas	
Exercise Activities	Time	Activity
	30 Minutes	Introduction, Threat Briefing and Opening Remarks
	60 Minutes	Exercise Play
	30 Minutes	Break
	60 Minutes	Exercise Play
	30 Minutes	Hotwash
Purpose	Experience a Complex Climate Change Event (Heat) and Cyber event	
National Institute of Standards and Technology Cybersecurity Framework Functions	Identify, Protect, Detect, Respond, Recover	
Objectives	<ol style="list-style-type: none"> 1. Test participants ability to problem solve 2. Test information sharing processes 3. Identify 3 resources for planning, responding, recovery 4. Identify 2 areas of best practices for recovery 5. Identify 2 opportunities to engage national stakeholders on federal guidance and policy impacting local preparedness 	
Threat or Hazard	Climate Change Event (Heat) and Cyber Attack	

Scenario	Dr. Evil is taking his revenge upon the Preparedness Summit! Back by popular demand! This exercise is a new story with a larger seat count! Dr. Evil is cyber-attacking the county and hospital during an emergency! We are ready for his revenge plans; we can stop him and save the world! Join us for a fun and informative tabletop/game combining extreme weather impacts, public health, and cybersecurity into a complex coordinated disaster event. You will love this interactive experience to laugh, learn, and network. The bad guy is fake, but the decisions are real. This exercise is Homeland Security Exercise and Evaluation Program (HSEEP) compliant and based on recommendations from the U.S. Department of Health and Human Services (HHS), National Institute of Standards and Technology (NIST), and Cybersecurity and Infrastructure Security Agency (CISA).	
Sponsor	Coconino County Health and Human Services	
Participating Organizations	Attendees	
Points of Contact	Coconino County Health and Human Services Blake Scott bscott@coconino.az.gov	Code Line Networks Scott Fraser scott@codelinenetworks.com
We would like to thank the following individuals for their participation in the development of this exercise	Tricia Topasna Troy Adams Paul Wagner	

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
Test participants ability to problem solve
Test information sharing processes
Identify 3 resources for planning, responding, recovery
Identify 2 areas of best practices for recovery
Identify 2 opportunities to engage national stakeholders on federal guidance and policy impacting local preparedness

Table 1. Exercise Objectives

Participant Roles and Responsibilities

Lead Exercise Staff provide guidance and advice to volunteer controllers. They will provide exercise materials, and answer questions from both players and controllers, ensure that the exercise is running smoothly and participants are having an enjoyable experience

Controllers/Evaluators (C/E) provide situation updates and moderate discussions. They also provide additional information or resolve questions as required. 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.

Players have an active role in discussing or performing their primary roles and responsibilities during the exercise. Players discuss or initiate actions in response to the scenario. Suggested players include representatives from the Emergency Management, Public Health, IT, communications, human resources (HR), and legal departments, and any personnel with real-world cyber incident response roles.

Observers do not directly participate in the exercise. However, they may support the development of player responses to the situation during the discussion by asking relevant questions or providing subject matter expertise. Observers may include representatives from the IT, communications, HR, and legal departments as well as leadership who do not have assigned real-world cyber incident response roles but may be involved in response efforts or have a need-to-know.

Note-takers (if assigned) are assigned to observe and document exercise activities. Their primary role is to document player discussions, including how and if those discussions conform to plans, policies, and procedures.

Exercise Structure

This exercise is intended to be a facilitated exercise. Players will participate in the following:

- Climate and Cyber threat briefing (if desired)
- Exercise Play
- Hotwash

Exercise Guidelines

- This exercise is intended to be held in an open, no-fault environment. Varying viewpoints are expected.
- Respond to the scenario utilizing your knowledge of existing plans and capabilities, along with the valuable insights derived from your training and experience.
- Decisions are not precedent-setting and may not reflect your local government's final position on a given issue. This exercise is an opportunity to discuss and present multiple options, possible solutions, and suggested actions to resolve or mitigate a problem.
- There is no hidden agenda, and there are no trick questions. The resources and written materials provided are the basis for discussion.
- In any exercise, assumptions and artificialities are necessary to complete play within the given time, achieve training objectives, and account for logistical limitations. Please do not allow these factors to negatively impact your participation in the exercise.

Exercise Logistics

Safety

Exercise participant safety takes priority over exercise events. The following general requirements apply to the exercise: For an emergency that requires assistance, use the phrase **“real-world emergency.”**

Post-exercise and Evaluation Activities

Hot Wash

At the conclusion of exercise play, controllers facilitate a Hot Wash to allow players to discuss strengths and areas for improvement and allow 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.

Controller Information and Guidance

Exercise Control Documentation

Controller Package

The controller package consists of the C/E Handbook, activity logs, badges, and other exercise tools (e.g., MSEL) as necessary. Controllers must bring their packages and any additional professional materials specific to their assigned exercise activities.

Controller Instructions

Before the Exercise

- Review appropriate emergency plans, procedures, and protocols.
- Review appropriate exercise package materials, including the objectives, scenario, injects, safety and security plans, and controller instructions.
- Attend required briefings.
- Report to the exercise check-in location at the time designated in the exercise schedule, meet with the exercise staff, and present the Player Briefing.
- Be at the appropriate location at least 60 minutes before the exercise starts.
- Obtain, locate and test necessary communications equipment.

During the Exercise

- Wear controller identification items (e.g., badge).
- If you have been given injects, deliver them to appropriate players at the time indicated in the MSEL (or as directed by the Exercise Director). **Note:** *If the information depends on some action to be taken by the player, do not deliver the inject until the player has earned the information by successfully accomplishing the required action.*
- Receive and record exercise information from players that would be directed to nonparticipating organizations.
- Observe and record exercise artificialities that interfere with exercise realism. If exercise artificialities interfere with exercise play, report it to the Exercise Director.
- Begin and end all exercise communications with the statement, **“This is an exercise.”**

After the Exercise

- Distribute copies of Participant Feedback Forms and pertinent documentation.
- All controllers are expected to conduct a Hot Wash at their venue and, in coordination with the venue evaluator, take notes on findings identified by exercise players. Before the Hot Wash, do not discuss specific issues or problems with exercise players.
- At exercise termination, summarize your notes from the exercise and Hot Wash, and prepare for the Controller and Evaluator Debriefing. Have your summary ready for the Exercise Director.

Appendix A: Exercise Schedule

Time	Personnel	Activity	Location
April 30, 2024			
10:00 AM	Controllers, evaluators, and exercise staff	Controller and Evaluator Briefing and room size up	Room 206 A
As needed	Controllers and exercise staff	Set up control cell and walkthrough	
March 25, 2024			
7:00 AM	Lead Exercise Staff	Check-in for final instructions and communications check	Room 206 A
7:15 AM	Lead Exercise Staff	Identify tables for exercise play Ensure tables are far enough away for conversation to not distract each other	
7:30 AM	Lead Exercise Staff	Deploy exercise materials to tables. Have packets of All Exercise Players, Controller, County, and Hospital Packets ready.	
8:00 AM	Lead Exercise Staff	Musical Chairs, have all participants stand. Recruit Controllers and Evaluators (need 11 total). Indicate a wall for hospital players and a wall for county players, estimate size of 2 groups.	
8:07		6 players will sit at each table, indicate tables and announce the type of players that should sit there	
8:15	Lead Exercise Staff	Perform starting briefing	
8:25	All	Exercise Starts	Room 206 A
9:30	All	Exercise goes on Break	
10:00	All	Exercise continues	
11:00	All	Exercise End Hot Wash/Participant Feedback Forms	
May 15, 2024			
1:00 PM	Controllers, evaluators	Controller and Lead Exercise Staff After Action Review	Virtual

Appendix E: Exercise Scenario

Digital products needed:

1. Post exercise feedback form
2. Drive Link to documents

Physical products needed:

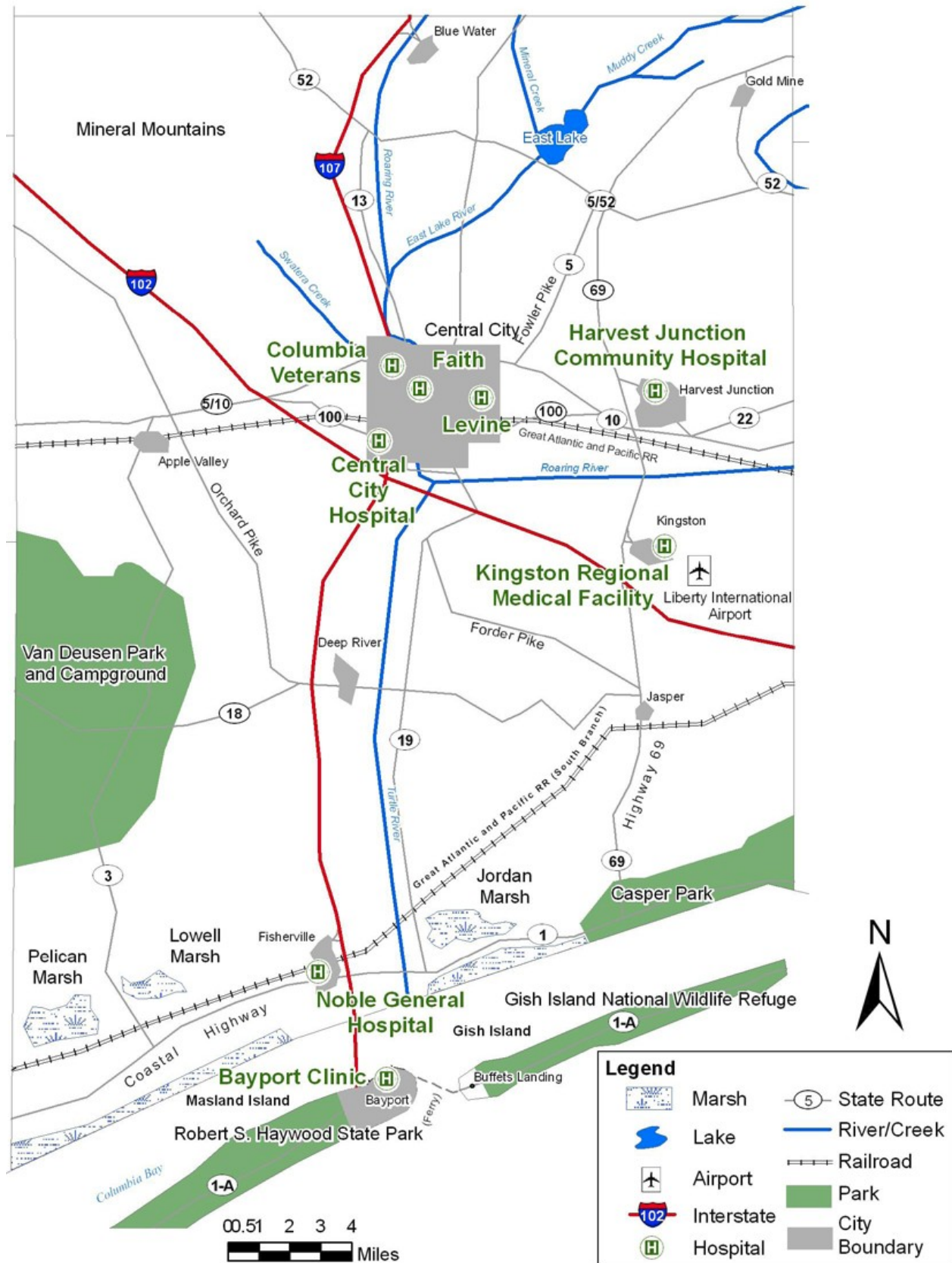
1. Sign in sheet
2. Playbooks: Heat and Cyber
3. Controller Sign in sheet
4. Situation manuals – 2 per table (11 tables) + 3 Lead Exercise Staff + 4 Extras
5. QR Code scanning to different forms and products
6. Controller Evaluator Handbook – 1 per table (11 tables) + 3 Lead Exercise Staff, + 4 Extras
7. Player sheets - 9 County + 6 Hospital

Demographic information for participants

In the following sections Jurisdiction information will be provided for 2 different participant types:

This information is pulled from the Exercise Simulation System Document with addons created by Coconino County as needed to create example documentation.

1. County Public Health Department – Liberty County
2. Hospitals – Central City Hospital



Exercise Start

Evaluator Information
and Guidance

9 Coconino County Health and Human Services

TLP: CLEAR

All Controllers read aloud the following

1. Welcome! This exercise is designed to test your decision-making abilities in a complex event. I will be your controller for this exercise. I have been provided with a controller handbook and props to guide us through the exercise. Also available on the table are situation manuals, sign in sheets, player character sheets, and QR codes and links for additional digital copies. I am likely a spontaneous volunteer so please be patient with me as I am experiencing the exercise at the same time as you are.
2. *Introduce yourself and others around the table*
3. *Start the sign in sheet around the table, continue to read aloud the following: *
4. We want everyone to have fun. There are no “right answers.” And you might not finish the full materials provided, that’s okay.
5. The Lead Exercise Staff are here to help the controllers and players with any questions they might have. They are experts in their field, but they are human and may not have all the answers or may have forgotten to provide a key piece of information within the guides provided. Please forgive us if we did.
6. The Lead Exercise Staff may be called over by name or with a raised hand, if we’re not immediately available please have someone write down the question or issue and continue play/discussion if you can.
7. Controllers, we have made this a split exercise. There will be some parts of the exercise for all players, County players, and Hospital players. Please engage with the “**All Controllers**”, and your assigned Table player (Labeled either “**County Controllers**” or “**Hospital Controllers**”). Much of the materials provided are scripts or lists of discussion questions. We have labeled parts we believe are **mandatory components**,

and **optional components** may be used if the conversation is not robust. Use your best judgement.

8. Controllers may feel free to provide input on any of the discussion questions as a player.

County Controllers read aloud

Provided in the County Public Health packet is Liberty County

1. Included in the packet is County Demographic Information
2. Incident Action Plan documents for use as note taking and other use. We encourage you to develop a set of objectives and try to at least fill out a 201 document.

Hospital Controllers read aloud

Provided in the Hospital Packet is Central City Hospital

1. Hospital information and a daily census
2. Incident Action Plan documents for use as note taking and other use. We encourage you to develop a set of objectives and try to at least fill out a 201 document.
- 3.

Module 1

Thursday May 1, 2025

All Controllers read aloud

It is Thursday May 1st, 2025, May Day, also known as Labor Day in many countries. This day recognizes a demonstration on May 4, 1886, for the 8-hour workday, resulting in the Chicago Haymarket massacre. Many demonstrations are occurring across the country right now.

Spring is in full swing in your jurisdiction. Temperatures are warm, skies are beautiful and normal weather conditions in your area are 3 degrees warmer than 50 years ago. The county fair is planned to start this Friday through Sunday with a higher-than-average attendance expected.

The local National Weather Service has notified the Emergency Management Agency of an Extreme Heat event in the forecast. Meteorologists predict with high confidence a “heat dome” will enter the area and remain for several days. This warming trend will beat record highs and **have little to no overnight relief.**

All Controllers distribution of Day 1 - prop 1 of 3

This prop is available as a printout that you may provide to players. Prop 2 comes later.

The local National Weather Service releases an Extreme Heat Watch Product:

NWS - DAY 1 Prop 1 of 3

URGENT - WEATHER MESSAGE

National Weather Service of Columbia State

1257 PM MST THURSDAY

LIBERTY COUNTY, COLUMBIA

1257 PM THURSDAY






...EXTREME HEAT WATCH IN EFFECT FROM FRIDAY MORNING THROUGH
TUESDAY EVENING... HIGH CONFIDENCE

* WHAT...Dangerously hot conditions possible. Afternoon
temperatures 115 to 125.

- * WHERE...All the State of Columbia.
- * WHEN...From Saturday morning through Tuesday evening.
- * IMPACTS...High Heat Risk. Overexposure can cause heat cramps and heat exhaustion to develop and, without intervention, can lead to heat stroke.

All Controllers distribution of Day 1 – prop 2 of 3

This prop will be used as the temperature for the exercise. Players should refer to this prop for day-by-day temperatures. The five-day forecast:

	Thursday	Friday	Saturday	Sunday	Monday
					
	Sunny	Sunny	Sunny	Sunny	Sunny
High	80	91	114	121	120
Low	77	86	110	115	114

WEATHER RISK OUTLOOK

Risk levels incorporate potential impacts from weather hazards and likelihood of occurrence for a reasonable worst-case scenario.

	Thu 5/1	Fri 5/2	Sat 5/3	Sun 5/4	Mon 5/5	Tue 5/6	Wed 5/7
	Warm	Hot	Hot	Hot	Hot	Warm	Warm
Risk Levels	Little to None	Minor	Moderate	Major	Extreme		

All Controllers discussion questions

Mandatory components: Allow players to provide their input to each question before moving to the next discussion question. This exercise is a way to share ideas across our network, let the conversation travel, if players have questions of each other, allow them to a reasonable place.

*A note taker is recommended to write down critical insights, we'd like to collect "issues and concerns" *

1. What issues and concerns do you have about this extreme heat forecast?
2. What would your agency do now? It is still Thursday.
3. How would these decisions be made? Who needs to know?
4. (County Controller only): There is a county fair planned during this forecast period, what would your department do in response to this forecasted extreme heat event?
5. (County Controller only): Would your jurisdiction declare an emergency for extreme heat?
6. What plans, policies, and procedures do you have for heat/climate emergencies?
7. Would your agency open the Emergency Operations Center or Incident Command Team now?

Optional components: If you have time or interest, you may ask these questions:

1. What relationship does your home organization have with the National Weather Service?
2. Do you regularly receive communications from the National Weather Service?
3. Have you used heat risk maps for understanding temperature impacts?

All Controllers distribution of Day 1 - prop 3 of 3

Have a player read this prop.

Columbia Newspaper –Day 1 – Prop 2 of 2
<p>Headline: DR. EVIL RELEASED FROM PRISON</p> <p>Story: Dr. Evil, a notorious threat to humanity, was released today from his cryogenic prison after serving a 10-year sentence. Initially frozen as part of his punishment, Dr. Evil emerged looking unchanged from the day he was incarcerated. "He looks not a day older than when he went in," remarked Prosecutor Smithers. "I don't think he's aged at all."</p> <p>Upon release, Dr. Evil exhibited no remorse. When asked about his plans, he responded ominously, "You haven't seen the last of me!" while laughing uncontrollably and holding his pinky finger to his mouth. Many are questioning the Colombian government's decision to release such a dangerous individual.</p>

All Controllers discussion questions

Mandatory questions

1. Do your agencies have a way to receive threat intelligence?

Optional questions

2. From whom do you receive threat intelligence?
3. Do you have policies, procedures, and plans for threat intelligence?

Friday May 2, 2025

All Controllers read aloud


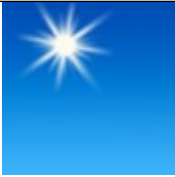


Today is Friday May 2, 2025. Temperatures are in the low 90s with little to no overnight relief. A heat warning is released, and so is Dr. Evil.

All Controllers - NWS Excessive Heat Warning – distribution of Day 2 – prop 1 of 2

The local National Weather Service office releases an Excessive Heat Warning Product:

NWS - Friday DAY 2 - Prop 1 of 2
<p>1149 AM MST Friday</p> <p>...EXTREME HEAT WARNING IN EFFECT FROM 10 AM FRIDAY TO 8 PM MST TUESDAY...</p> <p>* WHAT...Dangerously hot conditions. Afternoon temperatures 110 to 122 expected.</p> <p>Friday - Hot - Low 90s expected</p> <p>Saturday - Very Hot - 114 expected</p> <p>Sunday - Very Hot - 121 expected</p> <p>Monday - Very Hot - 120 expected</p> <p>* WHERE... State of Columbia.</p> <p>* WHEN...From 10 AM Friday to 8 PM MST Tuesday.</p> <p>* IMPACTS...Major Heat Risk. Overexposure can cause heat cramps and heat exhaustion to develop and, without intervention, can lead to heat stroke.</p>

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	Friday	Saturday	Sunday	Monday
				

	Sunny	Sunny	Sunny	Sunny
High	91	114	121	120
Low	86	110	115	114

WEATHER RISK OUTLOOK

Risk levels incorporate potential impacts from weather hazards and likelihood of occurrence for a reasonable worst-case scenario.

Fri 5/2	Sat 5/3	Sun 5/4	Mon 5/5	Tue 5/6	Wed 5/7
Hot	Hot	Hot	Hot	Warm	Warm
Risk Levels	Little to None	Minor	Moderate	Major	Extreme

All Controllers distribution of Day 2 – prop 2 of 2

Have a player read this prop

County Fair News - Friday Day 2 – Prop 2 of 2
Headline: Welcome to the Fair!
Story: The County Fair Opens Today! Among the attractions is an unexpected guest: Dr. Evil! Unaged, Dr. Evil addresses fairgoers with his signature mischievous grin proclaiming, “I’m a changed man”. Despite his declaration, he continues to say, “I’ll admit, being frozen made my prison sentence feel like the blink of an eye. And in that blink, I spared just a moment to consider change—then decided against it.”

All Controllers - Discussion questions

Mandatory:

1. Now that you have a heat warning, what would you plan to do?
2. Would the EOC/HEOC open for this event? Why or why not?
3. What are your priorities/objectives now?
4. What other agency would you inform about your planned actions (Internal/External)?
What communication method (email/phone)?

County Controller discussion questions

Mandatory:

1. If a cooling shelter was not discussed for opening, a County Elected Official asks the health department what the plans are for this heat event starting tomorrow.
 - a. What powers do county supervisors/elected officials have related to emergencies?

- b. How would your agency respond to questions about extreme heat preparedness?
 - c. Does your agency leadership know the emergency plan? How would they get this information?
2. The County fair is operated by the jurisdiction, what actions would you take to prevent heat injury at a county event?

Hospital Controller read aloud and discussion questions

Throughout Friday, heat injury patients start to arrive, 5 for the day. This is not yet overwhelming your emergency department, but it is obvious that this is occurring.

Mandatory:

1. As the heat is likely to increase over the weekend, would you increase staffing over the weekend?

Optional:

2. Would you assign an agency administrator for the weekend?
3. Would you increase facilities staffing over the weekend?




Module 2 – The Sizzle continues

Saturday May 3, 2025

All Controllers read aloud

Today is very hot, temperatures are expected to rise to 114 degrees in most areas. Temperatures inside all player's buildings are elevated and air conditioning is having a hard time maintaining temperatures. Facilities are monitoring the issue and trying to keep the HVAC systems running. Facilities also mention something about an issue with the Building Management System. (For controllers: If players ask about the Facilities issues, just mention that Facilities is looking into the issue and will report back soon).

The fair continues, Be Cool at the fair! Today is going to be a hot day at the fair, guests are encouraged to drink lots of water and stay cool. The fair has water stations throughout the venue and patrons are encouraged to visit the air-conditioned spaces frequently.

	Saturday	Sunday	Monday
	 Sunny	 Sunny	 Sunny
High	114	121	120
Low	110	115	114

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WEATHER RISK OUTLOOK

Risk levels incorporate potential impacts from weather hazards and likelihood of occurrence for a reasonable worst-case scenario.

	Sat 5/3	Sun 5/4	Mon 5/5	Tue 5/6	Wed 5/7
	Hot	Hot	Hot	Warm	Warm
Risk Levels	Little to None	Minor	Moderate	Major	Extreme

All Controllers discussion questions

Mandatory:

1. Now that the heat is here, what is your organization doing now?
2. This heat event is on the weekend, are you changing operations or keeping people working through the weekend?

All Controllers read aloud

Levine hospital, the second largest in the area, calls to request assistance in moving 20 patients out of their facility. The hospital emergency manager says “A wing of our hospital is having a problem with temperature controls, and that wing is getting very hot. We are moving patients out of that wing into hallway areas that are cooler. These patients are not in licensed bed areas but are safe and stable. These 20 patients are from our medical surge and trauma wing and are admitted with a variety of diagnosis, no telemedicine or cardiac care, all are semi-ambulatory, conscious, on IV medications and will need to remain in hospital care. Can you help us find beds for these patients?”

All Controllers distribution of Day 3 – prop 1 of 1 (Counties get 2 props this day)

Levine Hospital evacuation breakdown of information:

Type	Number of patients
Medical Admissions	10
Behavioral Hold	1
Trauma Admission	9

None of the patients are on telemedicine, cardiac care, critical care or intensive care.

All Controllers discussion questions

Note for Hospital Controller: There's a daily census located within the Hospital Player packet. The hospital player may decide to help by accepting patients. Let them decide.

Mandatory:

1. What would be your most important concern regarding this event?
2. How would your agency work to assist this patient evacuation?
3. (Hospital Controller Only): How does your organization manage census counts?
4. (Hospital Controller Only): How fast could you receive a census for your hospital?
5. (Hospital Controller Only): While this is an external event, does your transfer center manage outbound patients? Who would?

Optional:

6. What role does the healthcare coalition play in evacuating facilities?
7. What role does your state agency play in evacuation?

County Controllers read aloud

Emergency Management decides to open the Emergency Operations Center and invites the health department to participate. They would like to receive continuous updates about the Levine Hospital evacuation, if possible. As you walk into the building from the sweltering

heat, you notice that the building is not as cool as you'd expect with air conditioning. Emergency Management informs you that the Facilities Department is looking into the issue. They mentioned they had to call the Director of Facilities because it is the weekend.

County Controllers distribution of Day 3 - prop 2 of 2

As of May 3, 2025, the following hospitals provide their status, if hospital players see this, ignore the Central City Hospital Status information

Hospital	Status	Location	Total Beds
Central City Hospital	HEOC	Central City	360
Columbia Veterans Hospital	HEOC	Central City	100
Faith Hospital	HEOC	Central City	110
Levine Hospital	HEOC, Contingency, Evacuating 20 patients	Central City	43
Bayport Clinic	HEOC	Bayport	10
Noble General Hospital	HEOC, Diversion, Contingency	Fisherville	100
Harvest Junction Community Hospital	HEOC	Harvest Junction	100
Kingston Regional Medical Facility	HEOC	Kingston	100

County Controllers discussion questions

1. What role does the department or emergency operations center play in situational awareness of hospitals?
2. What would be your concern with all these hospitals going on diversion?
3. Heat relief?
4. What options do you have?
5. What would you likely do?

Hospital Controllers read aloud and discussion questions

It is about noon; 30 heat injury patients have arrived so far at the emergency department - 20 adults and 10 children from the county fair and the jurisdiction.

Mandatory:



1. Does your organization alter operations during medical surge events? How?
2. If you received an unusual number of patients, would you inform partners? How?

Module 3 wasn't there a cyber part?

Sunday, May 4, 2025

All Controllers read aloud

It is Sunday May 4, 2025. The hottest temperatures are forecasted at 121 degrees with overnight temperatures of 115 degrees. It is the last day of the fair. Radio broadcasts mention that Public Health and Parks and Recreation have informed all attendees to drink water, and mandatory family fun is guaranteed.

	Sunday	Monday
	 Sunny	 Sunny
High	121	120
Low	115	114

WEATHER RISK OUTLOOK

Risk levels incorporate potential impacts from weather hazards and likelihood of occurrence for a reasonable worst-case scenario.

Sun 5/4	Mon 5/5	Tue 5/6	Wed 5/7		
Hot	Hot	Warm	Warm		
Risk Levels	Little to None	Minor	Moderate	Major	Extreme

County Controllers read aloud and discussion questions

Your epidemiologists were able to note on Saturday 100 heat injury patients arrived at hospitals across the jurisdiction. The county's medical examiner's office informs you of an increase of decedents across their freezer capacity. They anticipate they will run out of space soon, if not today. So far, they have 20 heat related decedents from yesterday, in addition to normal death.

Mandatory:

1. What role does the health department have in heat relief? Would this change now that there are patients?
2. What are some issues and concerns regarding the storage of decedents in tractor trailers?
3. What non-profit partnerships might you use to set up heat centers, respite centers, and heat shelters?

Optional:

4. How would you organize these non-profit groups? Where (physically/virtually) would they coordinate?

County Controllers read aloud and discussion questions

The temperatures in the Emergency Operations Center have only increased, electronic door locks take a long time with multiple scans to open, and phones throughout the building seem to ring randomly without anyone on the line. Facilities is onsite, but mention they are having a hard time logging into the Building Management System. They have contacted Information Technology, but since it is the weekend, they've had to call the director to bring someone in.

Mandatory:

1. What are your issues and concerns about this part of the exercise?

Optional:

2. Do you have weekend service for facilities or information technology?

County Controllers read aloud and discussion questions

Central City Hospital's Emergency Manager calls to let you know that they're having a problem with their Building Management System that manages their heating, ventilation, and air conditioning systems, water pressure, fire alarms and door access controls. They note that temperatures in their hospital are rising, they cannot control their water pressure, and their security doors are no longer functioning. "It's crazy" they say over the phone. "I've never seen something like this." The hospital is looking into the issue and trying to figure out a fix. "We might need to move some patients out of here soon. Also, we're getting temperature alarms going off on pharmacy refrigerators and the blood bank."

Allow the conversation to flow, this is a complex issue, and it will only get more complex from here.

Mandatory:

1. What issues and concerns do you have about Central City Hospital?
2. Would the jurisdiction declare an emergency for an issue happening at a major hospital facility?
3. What information technology resources might you have available to help the hospital?
4. What are the public health impacts of a cyber incident at a healthcare facility?
5. Could you store medication within health department refrigerators? Do you know how you would accomplish this?
6. Do you know what the role of the Federal Bureau of Investigation (FBI) or Cybersecurity and Infrastructure Security Agency (CISA) is in this event?
7. What state assets do you have available to engage in a cyber security event? What are their limits?

Hospital Controllers read aloud

Charge nurses across the Central City hospital (your hospital) are calling regarding temperature issues. They say temperatures are getting hot within the patient care areas throughout the hospital. They also note that water pressure is “going crazy”, and that badge access doors no longer function. Facilities report their temperature readings show normal on the Building Management System, and the system shows the Air Conditioning system is working. Some facilities staff note an issue logging into the system, and they’ve informed Information Technology. A quick walk around the hospital with a thermometer, however, does indicate that patient care areas are increasing in temperature, and that Air Conditioning is not working in these areas.

Pharmacy also calls noting that temperature alarms are going off on refrigerators throughout the building and that the pharmacy checkout system is offline. Nurses have started to use downtime procedures to access medications and have noticed the refrigerators are increasing in temperature. The Blood Bank calls informing you that alarms are going off on their refrigerators as well.

A discussion with facilities reveals that the Building Management System operates the heating, ventilation, and air conditioning system, water pressure, fire alarms, and door access controls.

Hospital Controllers discussion questions

Allow the conversation to flow, this is a complex issue and will only get more complex from here.

Mandatory:

1. What issues and concerns do players have at this point?
2. What could the hospital do now?
3. At what point would you consider patient relocation?
 - a. How would the decision to relocate patients be communicated to patients and their families?
 - b. How would you address concerns about temperature-sensitive items?
 - c. What coordination would occur between local healthcare facilities to ensure access to temperature-sensitive items while maintaining their integrity?
4. What communications would occur with internal and external partners?
5. What actions would be taken if the Building Management System was inoperable?

Optional:

1. Would elective procedures be cancelled?
2. What kind of cyber security insurance do players have? Would it cover this?
3. Do you know what the role of the Federal Bureau of Investigation (FBI) or Cybersecurity and Infrastructure Security Agency (CISA) is in this event?

Hospital Controllers read aloud and discussion questions

The Facilities Department now confirms they cannot log into the Building Management System. They have deployed mobile Air Conditioning units into some areas of the hospital, but not all. Patients are moved into hallways, and some choose to sit next to the air conditioners.

Mandatory:

1. What would you like to do now?
2. What resources might you use to manage the consequences of this?

Monday, May 5, 2025

It is Monday, May 5, 2025, the heat continues with a high of 120 and a low of 114. This is the final day of the heat dome.

County Controllers read aloud and discussion questions

An email is sent to the global county email list that reads *"Hello! This is Dr. Evil. Your Building Management System has been locked. But do not fear! For the sum of \$5,500,000 in cryptocurrency, your access will be returned. The decryption key will expire in 72 hours. Please submit payment to the wallet below or I will start raising the temperature in 24 hours."*

Mandatory:

1. What would be your most important concern regarding this event?
2. What would you do now?
3. Are you aware of what non-deferable functions may be impacted by a loss of information technology?
4. Would you be able to prioritize software for your information technology department to bring non-deferable functions back online?
5. Describe your organization's decision-making process for ransomware.
 - a. Who is authorized to make the decision regarding whether to pay the ransom?
 - b. What are the advantages/disadvantages of paying?
 - c. What does your cyber insurance policy require you to do in this situation?

County Controller read aloud and discussion questions

Your facilities department was able to disconnect power to the building and run electrical lines from portable generators. This allowed them to prevent Dr. Evil from turning on the heat system as they continue to try to fix the Building Management System. They brought in portable light fixtures and air conditioners inside of the Emergency Operations Center. Laptops are being run by generator power and doors are propped open to move power around and as the door code systems no longer work. The temperatures inside the emergency operations center are bearable. Facilities notes this is an issue across all county-owned and operated facilities including the Health Department buildings.

Information Technology and their Cybersecurity teams have activated an Information Technology Help Desk Center and a Cybersecurity Response Center to manage this crisis.

Mandatory:

1. Have you practiced cyber events with an EOC? Do you expect your cyber security teams to integrate with the EOC? Do they know that?

County Controllers read aloud and discussion questions

The Central City Hospital emergency manager calls to say "It's bad. Dr. Evil is ransom the Hospital's Building Management System. We've lost air conditioning, water pressure, and door access controls no longer function. We need your help. We've decided to evacuate the hospital. I'll send you the hospital census. Can you store medications and blood?"

1. What is your main concern about this event?
2. What could you do to help the Central City Hospital?

Hospital Controllers read aloud and discussion questions

A ransom message is sent to email addresses across the hospital reading the following:

"Hello! This is Dr. Evil. Your Building Management System has been locked. But do not fear! For the sum of \$5,500,000 in cryptocurrency, your access will be returned. The decryption key will expire in 72 hours. Please submit payment to the wallet below or I will start raising the temperature in 24 hours."

Mandatory:

1. Describe your decision-making process for ransomware.
 - a. Who is authorized to make the decision regarding whether to pay the ransom?
 - b. What are the advantages/disadvantages of paying?
 - c. What does your cyber insurance policy require you to do in this situation?
2. What would you do now?
3. Are you aware that Information Technology and Cybersecurity teams will frequently deploy 2 different centers to manage this incident? Are you expecting them to participate in the Emergency Operations Center?
 - a. Have you practiced this?

Time Jump 1: Twenty days have passed

All Controllers read aloud

It is now May 25th. Twenty days have passed, and Information Technology has fully recovered the Building Management Systems. During this time, Facilities manually controlled the HVAC by Day 5. The door code system is finally fixed.

Some final questions to consider as we come to a close:

Mandatory:

1. Does your agency have policies for maximum hours worked during a single day?
2. What resources would you have to alleviate stress in your staff?
3. What lessons did you learn from this event that you'd like to share with the larger group?

4. Did you have fun?