

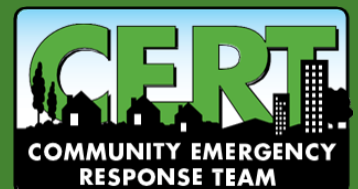


CERT Unit 9: Course Review, Final Exam, and Disaster Simulation

Participant Manual



FEMA





CERT Unit 9: Course Review, Final Exam and Disaster Simulation

This unit includes:

- A Review of Key Points from the Course**
- A Final Exam**
- A Final Exercise**

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SECTION 1: COURSE REVIEW

Course Overview

If you do not remember a particular key point, refer back to that specific unit.

Unit 1: Disaster Preparedness

- Home and workplace preparedness
 - Assembling a disaster supply kit
 - Developing a disaster plan
 - Developing a safe room
 - Evacuation versus sheltering-in-place
- Specific preparedness measures for local high-risk hazards (including terrorism)

Unit 2: CERT Organization

- Organizational structure
 - Well-defined management structure
 - Effective communications among agency personnel
 - Accountability
- Command objectives
 - Identify the scope of the incident through damage assessment
 - Determine an overall strategy and logistical requirements
 - Deploy resources efficiently but safely

Units 3 and 4: Disaster Medical Operations

- Life-threatening conditions
- Methods for controlling bleeding
 - Direct pressure
 - Tourniquets
 - Recognizing shock
- Maintaining body temperature
- Opening the airway
 - Positioning
 - Jaw-thrust maneuver
- Wound care
- Special considerations when head, neck, or spinal injuries are suspected
- Treatment area considerations
- Splinting and bandaging
- Basic treatment for various injuries
- Establishing a treatment area
- Head-to-toe assessments

Unit 5: Disaster Psychology

- In the aftermath of disasters, survivors and disaster workers can experience psychological and physiological symptoms of stress

- The steps CERT leaders should take to reduce stress on team members
- The steps CERT members can take to reduce their own stress levels
- Strategies for helping survivors work through their trauma

Unit 6: Fire Safety and Utility Controls

- Fire chemistry
 - The fire triangle
 - Classes of fire
- Fire size-up considerations: size-up of a situation involving a fire and the additional fire considerations
- Firefighting resources
 - General resources available
 - Portable fire extinguishers, their capabilities and limitations
- Fire suppression safety
 - Safety equipment must be used at all times
 - CERT members must always use the buddy system
 - Fire suppression group leaders should always have a backup team available
- Fire and utility hazards
 - Electrical
 - Natural gas
 - Flammable liquids
- Hazardous materials
 - Identification
 - Defensive strategies

Unit 7: Light Search and Rescue

- Search and rescue are really two functions
- Goals of search and rescue
 - Rescuing the greatest number of people in the shortest amount of time
 - Rescuing the lightly trapped survivors first
- Size-up
 - Construction types
 - Related hazards
- Structural damage
 - Light damage
 - Moderate damage
 - Heavy damage
- Search techniques
 - Be systematic and thorough
 - Mark areas searched
 - Document search results
- Rescue techniques
 - Survivor carries
 - Leverage and cribbing

— Lifts and drags

Unit 8: Terrorism

- Active shooter tactics
- CBRNE indicators
- CERT protocols for terrorist incidents
- Protective actions following a terrorist incident

SECTION 2: CERT BASIC TRAINING FINAL EXAM

Unit 1: Disaster Preparedness

1. When a disaster occurs, a CERT member's first responsibility is to:
 - A. Join the CERT in disaster response efforts
 - B. Help professional responders
 - C. Ensure personal and family safety
 - D. Do the greatest good for the greatest number of people
2. CERT members volunteer to fill non-disaster roles. An example of a non-disaster function of CERTs is:
 - A. Staffing parades, health fairs, and other special events
 - B. Monitoring the news for potential disaster threats
 - C. Petitioning local officials for more local emergency response funding
 - D. Distributing political pamphlets and other materials
3. There are five types of disasters. They are natural, terrorist, home fires, pandemic and _____.
 - A. Mechanical
 - B. Biological
 - C. Chemical
 - D. Technological and Accidental
4. Which of the following is NOT a hazard associated with home fixtures?
 - A. Gas line ruptures
 - B. Hazardous material spill
 - C. Injury or electric shock
 - D. Fire from faulty wiring
5. One of the steps in preparing for a disaster is to develop a disaster supply kit. Where should you keep separate disaster supply kits?
 - A. Home and work
 - B. Every room in the house
 - C. Vehicle
 - D. Home, work, and vehicle

Unit 2: CERT Organization

Following an earthquake, you and your fellow CERT members mobilize and meet at a disaster scene, where fire and law enforcement officials have already arrived. Before taking action, you work with the professional responders to get organized.

1. What is the name of the system used by emergency response agencies to manage emergency responses?
 - A. Incident Command System (ICS)
 - B. Strategic Planning Unit (SPU)
 - C. Search and Rescue System (SRS)
 - D. Rescue Command System (RCS)
2. In the CERT command structure, how is the CERT leader established?
 - A. By being the first person to arrive on the scene
 - B. By seniority
 - C. By department
 - D. By the local police chief

You are the CERT Team Leader and therefore responsible for directing team activities. You establish a Command Post for your CERT.

3. What should you do if you have to leave the command post for whatever reason?
 - A. Ask a law enforcement official to take over while you're gone
 - B. Designate CERT Team Leader status to someone else in the Command Post
 - C. Leave without delegating any of your Team Leader responsibilities
 - D. You may never leave the Command Post under any circumstances
4. CERT members should always be assigned to teams of at least how many people?
 - A. Six
 - B. Three
 - C. Two
 - D. Four
5. A woman comes up to a disaster scene that you have determined is unsafe to enter. What should you do?
 - A. Warn her that the situation is unsafe
 - B. Threaten to call the police if she attempts to enter
 - C. Physically restrain her from entering
 - D. Nothing; you should let her be
6. To whom should you give documentation?
 - A. The first professional responders on the scene
 - B. Your local CERT leader
 - C. Keep it for your own records
 - D. The National CERT Program Office

7. Which of the following forms contains essential information for tracking the overall situation?
- A. Survivor Treatment Area Record
 - B. CERT Assignment Tracking Log
 - C. Message form
 - D. Equipment Resources form

Unit 3: Disaster Medical Operations — Part 1

In the aftermath of a magnitude 7.7 earthquake, you have ensured your safety and your family's safety, and you grab your CERT kit and PPE. As you are making your way to your CERT's established meeting point, you come across a woman lying by the side of the road. You call out your name and affiliation and ask, "Are you okay?" There is no response.

1. Based on what you know thus far, how should you proceed?
 - A. Assume the woman is dead and continue to the CERT meeting point
 - B. Call 9-1-1 on your cell phone immediately
 - C. Assess for airway obstruction, excessive bleeding, and low body temperature
 - D. Make a note of the woman's location and go for help

You move closer to the survivor. Once again, you ask, "Can you hear me? Are you okay?" As you approach, you hear a very faint "help me," and now that you are closer, you notice that the survivor is bleeding heavily from a wound on her thigh. You immediately attempt to call 9-1-1 on your cell phone but the system is down.

2. You know this woman is seriously injured. How would you help her?
 - A. Assess for life-threatening conditions systematically, starting with the airway
 - B. Focus immediately on the most critical threat, the heavy bleeding
 - C. Get blankets from your supply kit because this woman is clearly in shock
 - D. Keep the woman company until more help arrives
3. You notice that the blood is spurting from the wound on the survivor's inner thigh. What type of bleeding is this?
 - A. Arterial
 - B. Venous
 - C. Capillary
 - D. Mortal
4. What is the first thing you do to stop the bleeding?
 - A. Apply a tourniquet
 - B. Wrap the wound with the first piece of cloth you can find
 - C. Elevate the survivor's heart above the wound by having the woman sit up
 - D. Using the sterile dressings in your supply kit, apply pressure directly to the wound

After a few moments, the bleeding slows considerably. You ask the woman, "Are you okay? Squeeze my hand if you can hear me." She is only able to groan unintelligibly in response. You notice that her fingers are cold — despite soaring temperatures — when she tries to squeeze your hand.

5. The signs and symptoms that you witness tell you that this woman is suffering from what?
 - A. Low blood sugar
 - B. Shock due to inadequate blood flow
 - C. Malnourishment
 - D. Shock due to the extreme stress of the situation
6. How would you treat the woman based on your findings?
 - A. Wrap her in something warm
 - B. Tell her to go to sleep
 - C. Ask her to hold the dressing in place while you search for help
 - D. Give her food and water

You arrive at the meeting point and your CERT Team Leader assigns you to help with the survivors. A woman runs into the treatment area holding a little boy and frantically calling out, "Someone please help my son, he's turning blue! I don't think he can breathe!" You turn and run to help the woman. You ask her to put her son down so you can help.

7. What is the first thing that you should do?
 - A. Conduct a head-to-toe assessment
 - B. Have another volunteer lead the mother away
 - C. Assess for airway, bleeding, and low body temperature
 - D. Perform CPR

While listening for lung sounds, you notice that the boy is wheezing and his lips are blue. You cannot find anything obvious obstructing his airway. As you glance down quickly at the rest of the boy's body, you notice an angry red welt on his inner arm.

8. You have reason to suspect that this boy is suffering from:
 - A. Anaphylaxis
 - B. An unknown blood-borne disease
 - C. Hypertension
 - D. Hypothermia

Unit 4: Disaster Medical Operations — Part 2

A Category 4 hurricane has just struck your town. You are assigned by your Team Leader to the treatment area. You are directed to help with the survivors. A fellow team member asks you to get some clean water to wash soiled gloves. You know the supply team is on its way but could be several hours away. Grabbing a bucket, you run to a nearby stream for water.

1. What should you do to sterilize the water for medical use?
 - A. Mix 1-part bleach and 10 parts water
 - B. Mix in 8 drops of non-perfumed chlorine bleach per gallon of water and wait for 30 minutes
 - C. Take the bucket and find a place to boil the water, since you assume that one of the buildings must have a functional kitchen
 - D. Mix in 8 tablespoons of non-perfumed chlorine bleach and wait for 30 seconds

Once you arrive back at the treatment area with the water, the team leader explains that a survivor has died. The team leader puts you in charge of establishing the morgue.

2. How and where will you set up the morgue?
 - A. Near the treatment area
 - B. Inside the treatment area
 - C. Away from the treatment areas
 - D. None of the above

A few hours later, you return to the treatment area and ask your Team Leader for a new assignment. She quickly explains that the area is overflowing with survivors and asks you to help perform rapid head-to-toe assessments.

3. What acronym does the medical community use to remember what to look for when conducting a rapid assessment?
 - A. DCAP-PMS
 - B. SALT
 - C. DCAP-BTLS
 - D. IDMD-SALT

While performing your first assessment on a young adult male, you notice bruising around the eyes and blood in the nose. The survivor says his hands feel numb and he is unable to move them.

4. While it is impossible to be sure out in the field, you should assume that:
 - A. The survivor is in shock
 - B. The survivor will die unless you find a medical professional
 - C. The survivor is bleeding internally
 - D. The survivor has a closed-head, neck, or spinal injury

Unit 5: Disaster Psychology

You and your fellow CERT members arrive at a neighboring community following a devastating tornado. Survivors have been sifting through debris and have found six bodies. They tell you about what it was like to find the bodies. One of your fellow CERT members starts feeling nauseated. He is obviously overwhelmed.

1. Which of the following is not an example of a physiological symptom of trauma?
 - A. Hyperactivity
 - B. Denial
 - C. Headaches
 - D. Loss of appetite

Some of the survivors you rescue exhibit signs of trauma, and you've warned your team ahead of time that they should expect some of the psychological effects will be directed toward them. In order to help your team better understand what the survivors are going through, you've also explained the six phases of a crisis following a disaster.

2. During which phase do survivors attempt to assess the damage and locate other survivors?
 - A. Pre-disaster phase
 - B. Impact phase
 - C. Honeymoon phase
 - D. Heroic phase

The goal of on-scene psychological intervention by CERT members is to stabilize the incident scene by stabilizing individuals. You come across a man who is in shock and bleeding from his chest.

3. What should you do first?
 - A. Listen empathetically
 - B. Attempt to locate the man's family or friends to provide natural support
 - C. Say, "You'll get through this"
 - D. Address the man's medical needs
4. Which of the following is not a step that your team's members should take in the future to personally reduce stress?
 - A. Eat a balanced diet
 - B. Get enough sleep
 - C. Take antidepressants
 - D. Connect with others

Unit 6: Fire Safety and Utility Controls

While searching a lightly damaged structure following a destructive storm, you and fellow CERT members locate a fire.

1. As you conduct your fire size-up, which of the following is the least important question to consider:
 - A. Can my buddy and I fight the fire safely?
 - B. Do my buddy and I have the right equipment?
 - C. How many people are in the building?
 - D. Can my buddy and I escape?

From your size-up, you determine that the fire can be put out with a portable fire extinguisher. You and your buddy quickly retrieve a portable fire extinguisher, which you have determined is the right type of extinguisher to fight this fire.

2. What should you do before approaching the fire?
 - A. Test the extinguisher after pulling the pin
 - B. Wait for the fire department to arrive
 - C. Tell your buddy to wait at the door for you
 - D. Make sure the house's water supply is shut off

Following the correct CERT procedure (P.A.S.S.), you discharge the extinguisher.

3. What should you do if the fire continues to burn 5 seconds after you start to extinguish it?
 - A. Check the label on the extinguisher
 - B. Look for creative resources to fight the fire
 - C. Leave immediately
 - D. Back out and signal for your buddy to attempt to suppress the fire
4. The fire has spread to other areas by the time the fire department arrives. What's your next course of action?
 - A. Attempt to suppress the fire again with a new extinguisher
 - B. Communicate what you know to one of the firefighters
 - C. Overhaul the fire
 - D. Send in a backup team to fight the fire
5. If the chief officer asks you and your fellow CERT members to remain outside at a safe distance, how should you respond?
 - A. Continue to conduct a size-up from a safe distance outside of the building
 - B. Leave the premises
 - C. Enter the house after the firefighters
 - D. Call in more CERT members for backup

While the fire department manages to suppress most of the fire inside the building, a small fire has started to spread through the yard. You notice a nearby shed is posted with an NFPA 704 Diamond featuring the numbers 1, 1, and 2.

6. What should you do?
 - A. Suppress and overhaul the fire because the numbers in the Diamond are small and indicate that little risk is present
 - B. Leave the area and communicate the information to one of the professional firefighters on the scene if they are accessible
 - C. Suppress and overhaul the fire only if the number in the blue quadrant is less than 2
 - D. Make sure you are using the correct type of fire extinguisher

Unit 7: Light Search and Rescue Operations

After a tornado ravages a nearby community, you and your fellow CERT members volunteer to help with the search and rescue operations. You arrive on the scene to discover collapsed houses, cars swept up into trees, and various debris strewn everywhere.

1. As you begin the CERT size-up process, what is the first thing you should do?
 - A. Gather facts
 - B. Assess and communicate damage
 - C. Establish priorities
 - D. Consider probabilities

You and three other CERT members begin searching the local library, a large brick building where many people in the community were instructed to take cover before the storm. A size-up of the building reveals superficial damage, including broken windows and cracked plaster.

2. How would you classify the damage to the building?
 - A. Heavy damage
 - B. Moderate damage
 - C. Light damage
 - D. Slight damage

As you continue your search of the library, you make a single slash next to the doorway of the first room you enter.

3. What information do you write in what will become the left quadrant of this search marking?
 - A. Information about hazards and collapses
 - B. The number of survivors in the room
 - C. Your agency or group ID
 - D. The room number

While stopping frequently to listen, you hear a faint cry for help from the corner of the room. You walk over to find a young boy who has glass shards in his leg and is unable to walk.

4. Keeping in mind that you are searching the room with only two other CERT members, which of the following is not a recommended way of moving the boy?
 - A. Blanket carry
 - B. Pack-strap carry
 - C. Chair carry
 - D. One-person arm carry

Upon completing your search and rescue in the library, you enter a house where the second floor has collapsed, creating a lean-to void.

5. How should you proceed?
 - A. Leave the premises immediately and mark the structure as unsound
 - B. Quickly search the ground floor
 - C. Use an axe or similar tool to knock down the floor and clear the void
 - D. Call for backup

Unit 8: Terrorism and CERT

You are having a business lunch downtown when you hear a loud explosion. You follow others outside to find what caused the noise. In the distance you can see heavy smoke rising from the electrical plant, the very same electrical plant used to power your town and several major cities in the area and that you saw on the news last night cited as a potential target for a recently uncovered terrorist plot. All around you, people are speculating that the plot was successful.

1. What is the first thing you should do?
 - A. Gather your CERT equipment and report for duty
 - B. Locate your family and evacuate to safety
 - C. Call the Federal Government to alert it about a terrorist attack
 - D. Initially monitor the situation from a safe place

You remember from the news report that the potential plot was uncovered when an electrical plant security guard noticed the same black van parked outside for over a week. Worried that someone was watching the building, he alerted local authorities.

2. Which of the eight signs of a terrorist attack did the security guard notice?
 - A. Surveillance
 - B. Tests of security
 - C. Acquiring supplies
 - D. Dry runs

A friend runs over to you, a little frantic, and asks why you are not headed to the disaster site to help. After all, he says, you are a trained CERT member.

3. How do you respond to your friend?
 - A. "Yes. You're right. I'm heading in that direction now."
 - B. "I am a CERT member, but I have to wait for an official to declare a disaster before I can activate."
 - C. "I'm not part of the Terrorist Response Team."
 - D. "You're right. I am a CERT member, but CERT members must not respond to a potential terrorist incident."

SECTION 3: DISASTER SIMULATION

Purpose: This simulation will give you a chance to apply many of the skills you learned during the earlier sessions.

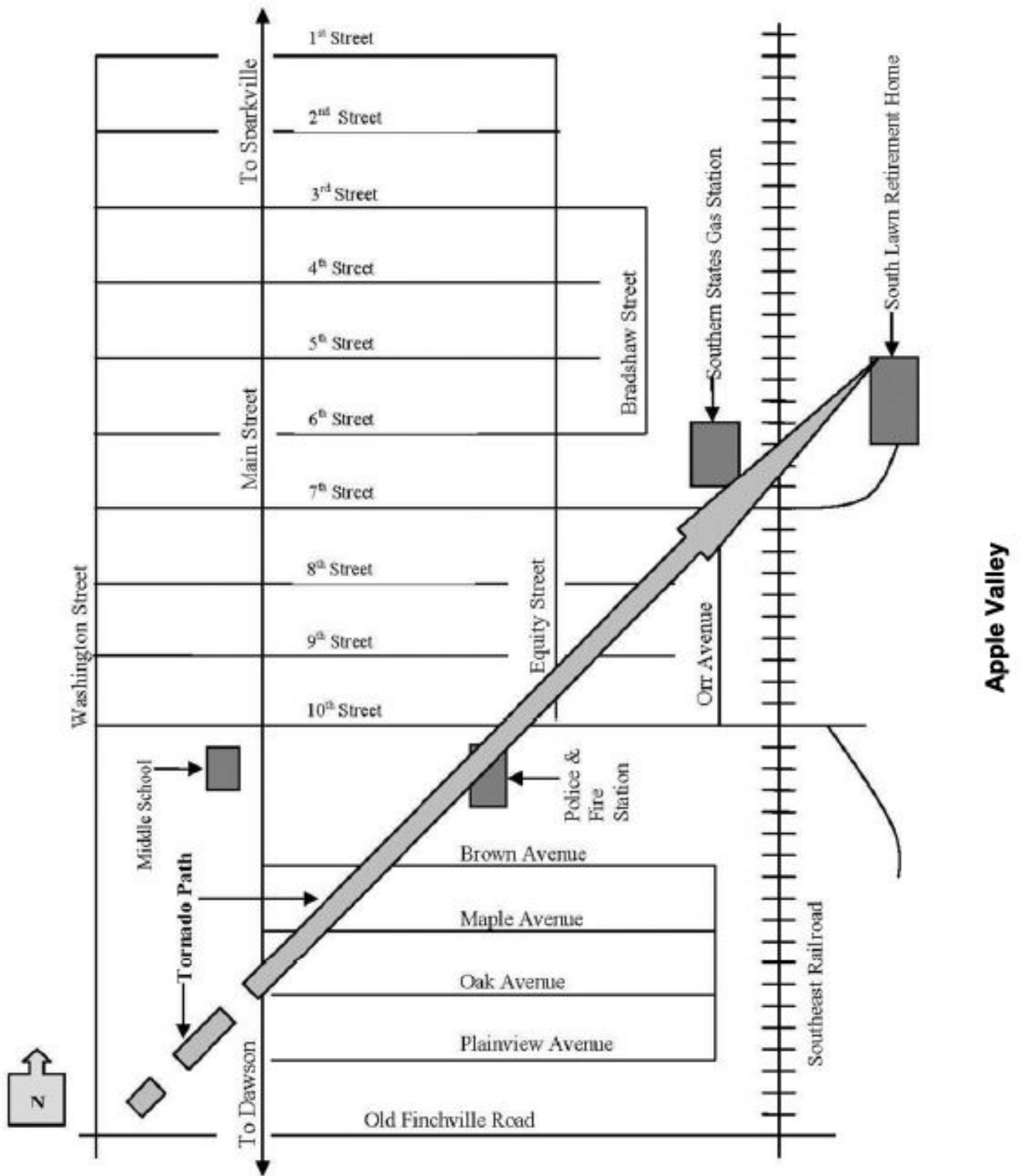
Instructions:

1. Break into four groups.
2. The simulation will be conducted across four stations.
3. At Station 1, each group will receive the disaster simulation. Based on that scenario, you will:
 - Determine the extent of damage
 - Establish team priorities
 - Determine the resources needed
 - Identify potential hazards
4. While at Station 1, your group will select a CERT Team Leader who will establish a CERT organization based on resources available and establish priorities.
5. At Station 2, your group will be required to:
 - Evaluate a fire situation
 - Select the proper extinguisher for the situation
 - Extinguish the fire

Each person will be required to extinguish the fire.

6. At Station 3, your group will be required to treat survivors with the medical supplies available.
7. At Station 4, your group will perform leveraging and cribbing to extricate survivors who are trapped by debris.
8. Your group will have approximately 15 minutes at each station.

Image 9.1: Disaster Simulation Map



SECTION 4: COURSE CONCLUSION

Don't forget the importance of continuing education and training to maintain and improve your skills and knowledge. You can attend:

- Periodic refresher training that is offered locally;
- Standard and advanced first aid courses that are offered through organizations such as the American Red Cross;
- Cardiopulmonary resuscitation (CPR) classes that are offered through organizations such as the American Red Cross or the American Heart Association; and
- Independent Study (IS) courses available online from FEMA at www.training.fema.gov/IS/.