

# LIGHT SEARCH AND RESCUE OPERATIONS

## EXCERPTS FROM COMMUNITY EMERGENCY RESPONSE TEAM

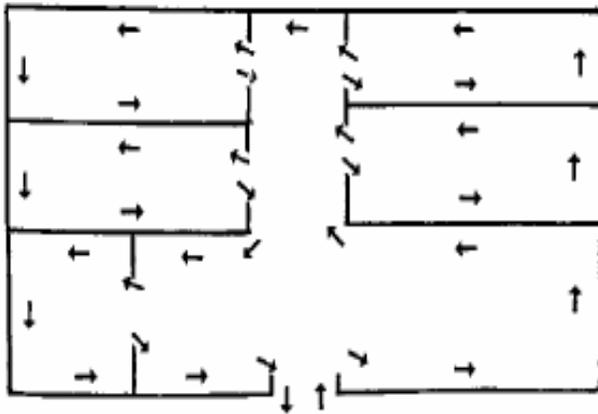
### CONDUCTING SEARCH OPERATIONS

Experienced search and rescue personnel have found these search methods to be effective:

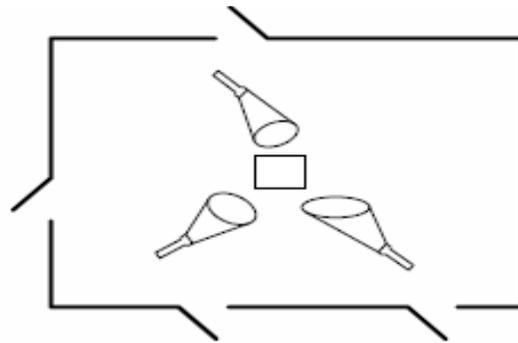
1. Begin the search by calling out to victims. Shout something like, "If anyone can hear my voice, come here." If any victims respond, give them further directions such as "Stay here" or "Wait outside" (depending on the condition of the building). Ask victims who respond for any information that they may have about the building or others who may be trapped.
2. Use a systematic search pattern. Ensure that all areas of the building are covered. Examples of systematic search patterns to use include:
  - Bottom-up/top-down.
  - Right wall/left wall.

#### Sample Systematic Room Search

Systematic Room-Search Pattern, bottom-up/top-down or right wall/left wall to ensure that the entire building is searched.



3. Stop frequently to listen. Listen for tapping, movement, or voices.
4. Triangulate. Triangulation enables rescuers to view a single location from several perspectives. Three rescuers, guided by victim sounds, form a triangle around the area and direct flashlights into the area. The light shining from different directions will eliminate shadows that could otherwise hide victims.



#### Triangulation

Triangulation: Three rescuers guided by victim sounds form a triangle around the area and direct flashlights into the areas. The light will help eliminate shadows.

### CONDUCTING RESCUE OPERATIONS

Rescues involve three primary functions:

- Creating a safe rescue environment by lifting objects out of the way, using tools to move objects, and removing debris.
- Triage or stabilizing victims.
- Removing victims in a moderately damaged building. Call in the medical team in a lightly damaged building.

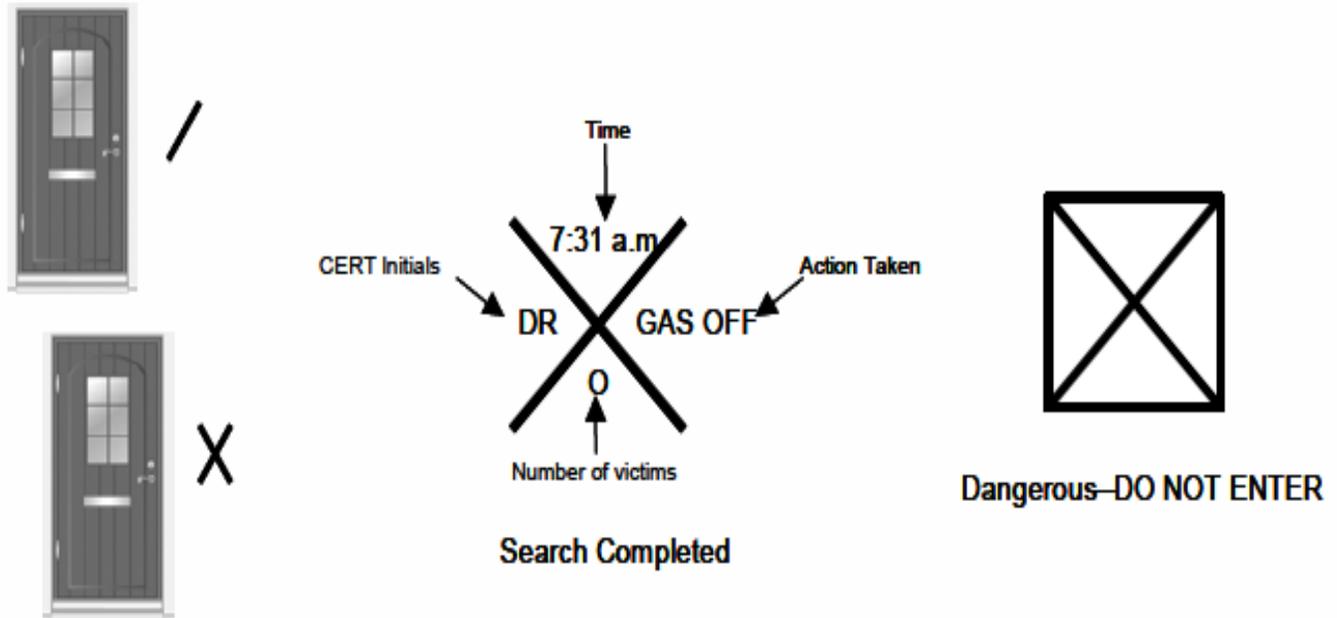


5. Mark searched areas to document results. Make a single diagonal slash next to the door just before entering a structure. Make an opposite slash (creating an "X") when all occupants have been removed and search and rescue efforts have been completed. The "X" signals to other potential searchers that the area has already been searched. This method:

- Indicates rescuer location.
- Prevents duplication of effort.

### Marking Searched Areas

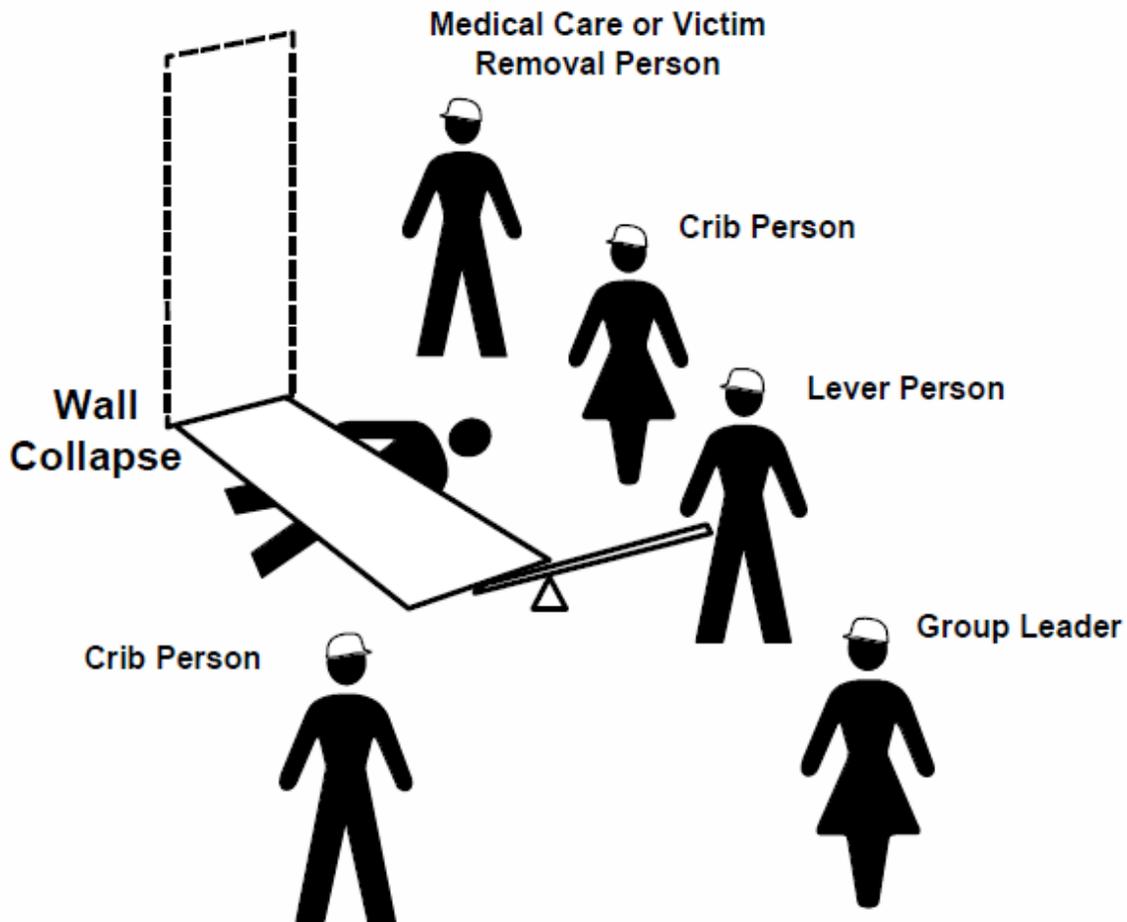
6. Report results. Keep complete records both of removed victims and of victims who remain trapped or are dead. Report this information to emergency services personnel when they reach the scene.



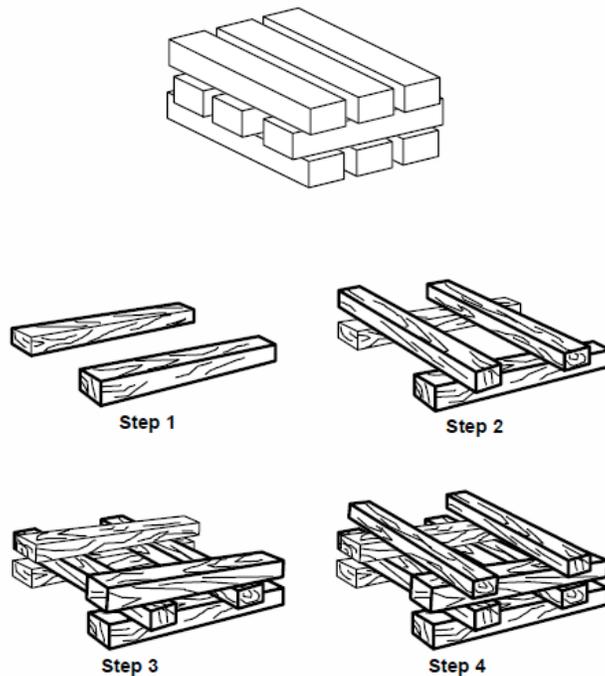
### LEVERAGING/CRIBBING OPERATION

1. Conduct a size up of the scene: Gather facts, identify hazards, and establish priorities.
2. Have one person in charge and formulate a plan of action based upon the information you have received. Identify how and where to lift and crib.
3. Gather necessary materials for lifting/cribbing operations:
  - Lever
  - Fulcrum
  - Cribbing blocks
  - Spacers/wedges
4. Use cribbing materials to stabilize the object prior to lifting. (Set the foundation of the box crib.)
5. Distribute crib materials as necessary to be readily accessible during the lifting operation.
6. Prepare to lift the object: Assemble the lever and fulcrum at the previously identified location.
7. Have someone available to handle the victim.
8. Initiate the lift, using the lever and fulcrum for mechanical advantage.
9. As the object is lifted, add cribbing as needed; build on the foundation of the box crib.
10. When the object is adequately supported, remove the lever and fulcrum. The victim may then be removed.
11. Re initiate the lift and begin removing cribbing materials, reversing the process by which the crib was built.
12. Progressively lower the object to the ground.
13. Reassemble the lifting/cribbing supplies to be available for additional operations.

# ARRANGEMENT FOR LEVERAGING/CRIBBING OPERATION



## BOX CRIBBING



Four steps for building box cribbing: Step 1: Position two pieces of wood parallel to each other on either side of the collapse. Step 2: Place two pieces of wood perpendicularly across the base pieces. Steps 3 and 4: Add additional layers of wood, with each perpendicular to the previous level.