

## SURVIVOR EXTRICATION


Safe methods for volunteer rescuers to transport disaster survivors.

Kathleen Reiter  
Corbett N.E.R.T.  
ECERT

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## ASSESSMENT

- STARTS FROM OUTSIDE THE BUILDING
  - Do a “360”; check the entire area!
- SCENE SAFETY IS FIRST!
  - NEVER enter an unsafe area!!
- WHAT ARE THE HAZARDS?
- WHAT CAN BE RESOURCES?
- WHO MAY NEED HELP?
  - When, what use pattern, who saw something?
  - Where do you need to go first?



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## DAMAGE ASSESSMENT

- Light- mostly cosmetic; shingles off, broken window, \*contents moved inside
- Moderate- some foundation movement, \*utilities damaged, chimney collapse
- Heavy- roof collapse, façade release, walls buckled, \*high risk of secondary collapse
  - Maybe the right thing to do is just to keep others away from the area & out of danger

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## SEARCH METHODS

- Call out to survivors
- Use a systematic search pattern
- Stop frequently to listen
- Triangulate
- MARK SEARCHED AREAS
- DOCUMENT RESULTS!

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## SEARCH METHODS

- Stop and listen while you look.
- If you hear someone, but can't see them have others help you locate the sound.
- Don't lose contact with your partner while you look!

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### SITE MARKING

- Marking tools - spray paint to sidewalk chalk
- What to write - who, when, hazards
- Where to write it - is it visible from the road?

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### MARKING THE BUILDING IN SEARCH & RESCUE

1. START BY DRAWING A DIAGONAL SLASH FROM RIGHT TO LEFT
2. JUST **ABOVE THE LINE** AT THE **LEFT**, WRITE YOUR TEAM ID
3. JUST **ABOVE THE LINE** AT THE **RIGHT**, WRITE THE DATE
4. JUST **BELOW THE LINE** AT THE **RIGHT**, WRITE THE HAZARDS
5. JUST **BELOW THE LINE** AT THE **LEFT**, LIST BODIES LEFT INSIDE; L= LIVING, D= DEAD
6. WHEN YOU LEAVE, FINISH THE LINE TO MAKE AN X, AND WRITE THE TIME UNDER THE DATE AT THE TOP
7. IF IT IS **UNSAFE TO ENTER**, **MAKE A BOX AROUND IT**

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### Minimize Risks

- KNOW YOUR LIMITATIONS!
- FOLLOW SAFETY PROCEDURES
- NEVER LEAVE AN AREA IN A CONDITION UNSAFE FOR OTHERS- rescuers following behind you you will be at risk!
- MARK UNSAFE AREAS

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### DEBRIS REMOVAL

- Remove debris only in selected areas where information suggests victims may be trapped.
- It is safer to reach victims from above, removing debris as necessary. Don't tunnel under debris. Avoid breaching walls, if possible.
- Continually evaluate progress.
- Rotate teams when possible. Find spontaneous helpers.

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### DEBRIS REMOVAL

- Form a human chain to move debris away from the immediate area. Plan a dump area ahead of time- don't move stuff twice!
- Lift safely
  - Use yours legs, not your back
  - Keep weight close to the body
  - Use separate motions- don't turn and twist

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### DEBRIS REMOVAL

- **LEVERAGING**-wedging a lever with a fulcrum under an object that needs to be moved. When one end of the lever is pushed down, the opposite end raises the object.
- **CRIBBING**-setting a framework of blocks or bars to support and stabilize an object.

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### CRIBBING BASICS

- SAFETY FIRST! -Nothing moves without a Safety Officer!
- Keep it level. Lift both sides evenly.
- Stabilize before you lift again.
- NO HANDS UNDERNEATH!
- If it is stuck, DON'T pull on it!
- Lift a little, then block it to keep it stable.
- Block it before the patient is moved!

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### CRUSH INJURY

- Compression syndrome and Crush Injury - how long has he been trapped?
- Toxins form in isolated tissue.
- Blood flow returns and circulates the toxins.
- Delayed mortality rate.

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### SURVIVOR EXTRICATION

- Self Removal -Voice TRIAGE
- Drags
- Lift / Carry

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### SURVIVOR EXTRICATION

- Depends on...
  - Number of Rescuers Available
  - Strength and Ability of Rescuers
  - Condition of the Survivor
  - General Stability of the Immediate Environment

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### RESCUE TOOLS

- Door
- Rug
- Blankets
- Tarps
- Ironing Board
- Chair
- Coats
- Rope, webbing, sheets



HELMET  
HEAVY GLOVES  
DUST MASK  
EYE PROTECTION  
STURDY SHOES

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### POSITION THE PATIENT

- Control Bleeding - splint if necessary
- Protect the Airway while you move!
- Control cervical spine if needed
- Lift with your legs - keep weight close to your body. The person at the head is in charge.
- Watch where you're going!
- Know where you will put him down before you pick him up!

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**PATIENT MOVEMENT  
By The Numbers  
(A 5-count exercise)**

- 1. Position him for movement
- 2. Pick him up (or prepare to drag)
- 3. Carry him off
- 4. Put him down somewhere safe
- 5. MAKE A RECORD OF IT!

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**TRANSPORT SITE**

- PLAN AHEAD!
- Up-hill and up-wind of hazard
- Easy access for ambulance, etc.
- Able to expand as needed - you may want to put the survivors from several buildings at one site to speed transport for medical support.

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**Survivor Rescue  
Summary**

- Use Voice TRIAGE
- Drag or Carry Victims
  - Depends on...
    - Environment
    - Rescuer Ability
    - Patient Condition
- DOCUMENT YOUR FINDINGS

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