

### Be Safe

- Shoes, gloves x2 (body substance isolation and work gloves), helmet, goggles, dust/N95 mask.
- In hazardous environment work in a team. Stay in constant contact with partner: touch, sight, sound.

### Sizeup

**Look:** 360° inspection – look, listen, smell. If appropriate, turn off gas/water during sizeup.

**Think:** *Is it safe?* How bad? How bad can it get? Do we have the training and equipment?

**Do:** Plan, Take Action, Evaluate, Repeat.

Damage?	Looks Like?	Do What?
Light	<i>Superficial damage, broken windows, fallen plaster/drywall, major damage is to contents of building</i>	Locate, triage, and remove victims to treatment area. Patient assessment can be done on-site.
Moderate	<i>Visible minor structural damage; decorative building elements damaged or fallen; many visible cracks in plaster/drywall; building still attached to foundation</i>	Minimize # of rescuers in building; minimize time inside. Quickly and safely remove all living victims.
Heavy	<i>Partial or total collapse of walls and/or ceilings; obvious structural instability; tilting; off foundation; heavy smoke or fire; hazardous materials inside; rising or moving water</i>	Do Not Enter. Warn people to stay away.

### Fire Suppression – consider only in lightly or moderately damaged structures

- Quick escape? Right extinguisher? No other hazards (e.g. falling debris)? All YES, then GO.
- Two in together, *in physical contact*. One looks only at the fire; one looks everywhere else.

P-pull Pin	T-test extinguisher	A-aim	S-squeeze	S-sweep
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### Search and Triage

Keep track of who is inside and what is found:



Single slash means search operations in progress. Use at main entry and separate wing of large building. Info area (⚙️) includes team ID and time/date of entry.



Crossing slash is drawn when search is complete (all team members out). After exiting and drawing the 2<sup>nd</sup> slash, add:

**TOP QUADRANT** – time/date search team left the structure

**RIGHT QUADRANT** – hazards and any action taken to address them

**BOTTOM QUADRANT** – number of live and dead victims still inside. [“0” = no victims]



When search team has to leave *without completing the search* (e.g. aftershocks), a solid circle is drawn at the mid-point of the 1<sup>st</sup> slash. Add all info for all four quadrants. Indicate areas searched in a box below the ‘X’

### Search

In teams of two, use systematic search pattern. If extra resources, extra teams “leapfrog.”

### Triage

- Voice triage – count and tag on way out. Everyone gets handed over to medical team.
- For all the rest: (1) check for responsiveness at approach; (2) check airway; (3) do blood sweep; (4) look for signs of shock.

**Red** – *Airway, Bleeding, or Shock*: Compromised airway, severe uncontrolled bleeding, unconscious, or signs of shock (rapid, shallow breathing; pale, cool, clammy skin; disoriented/very confused). Maintain airway, control bleeding, treat shock, evacuate ASAP.

**Airway:** Head tilt, chin lift; look, listen, feel. Pad under upper-back to maintain.

**Bleeding:** Apply direct pressure & elevate.

**Shock:** Keep lying down, keep warm, maintain airway.

**Yellow** – *Not red & not walking*: Conscious, oriented, even with significant fracture or other significant injury, but without signs of shock. Prevent shock; let them know “Someone will be back for you.”

**Green** – *Walking wounded*: Bad injury to no apparent injury & walking & alert and oriented.

**Black** – *Dead*: No breathing (open airway at least twice), or obvious mortal wounds.

Search and Rescue Action Plan (Partial)		
Light Damage	Moderate Damage	Heavy Damage
<ol style="list-style-type: none"> <li>1. Secure building utilities as needed.</li> <li>2. Establish and coordinate search/triage, rescue, and medical teams.</li> <li>3. Treatment areas can be in the lightly damaged building.</li> <li>4. <b>Primary Mission:</b> Locate, triage, stabilize, and prioritize removal of victims to designated treatment area.</li> <li>5. Continue evacuation process until all victims have been removed and accounted for.</li> <li>6. Reassess structural stability and available resources for heavy rescue problems.</li> <li>7. Document location of trapped and/or missing.</li> </ol>	<ol style="list-style-type: none"> <li>1. Secure building utilities (gas, electrical, water).</li> <li>2. Gather information (victim locations) before entry.</li> <li>3. Establish control person at exit and entry points.</li> <li>4. Establish and coordinate two- to four-person rescue teams.</li> <li>5. <b>Primary Mission:</b> Locate, stabilize, and immediately evacuate victims to a safe area while minimizing the number of rescuers inside building.</li> <li>6. Perform triage and other medical care in a safe area.</li> <li>7. Continue rescuing lightly trapped victims until complete or no longer safe.</li> <li>8. Continue evaluating safety.</li> <li>9. Document location of heavily trapped or deceased victims.</li> </ol>	<ol style="list-style-type: none"> <li>1. Secure building perimeter and warn untrained and well intentioned volunteers about danger and entry into building.</li> <li>2. From the exterior of the building, attempt to shut off gas (if it is possible and safe to do so).</li> <li>3. From the exterior, encourage survivors to self-rescue.</li> <li>4. Gather available information from survivors or witnesses for professional rescue teams.</li> </ol>
<b>Treatment ☺ = Beyond CERT training. Consider when no professional medical care for &gt;3 hours</b>		
<b>Patient Assessment in addition to Head-to-Toe Examination</b>		
While patients are conscious, record <b>SAMPLE</b> history (as reported by patient): <b>S</b> -Symptoms; <b>A</b> -Allergies; <b>M</b> -Medications they are taking; <b>P</b> -Pertinent medical history; <b>L</b> -Last they ate and eliminated; <b>E</b> -Events.		
<b>Shock kills! Treat early</b>		
Signs: rapid, weak heart rate; rapid, shallow breathing; pale, cool, clammy skin. Treatment: Keep victim lying down; keep victim warm and hydrated; identify cause (e.g. bleeding).		
<b>Wounds</b>		
Bleeding: Direct pressure & elevate. ☺ Tourniquet is OK: 10 minutes max, loosen, re-tighten if needed.☺ Prevent infection: clean it!:		
<ul style="list-style-type: none"> <li>• Soap and water around wound.</li> <li>• Remove foreign matter; scrub abrasions if needed.</li> <li>• Clean wound with only clean water.</li> <li>• Dress &amp; bandage. ☺ pack gaping wounds bigger than ½" wide with damp gauze.☺</li> </ul>		
☺ Can remove impaled objects from cheek; from extremity for evacuation.☺		
<b>Broken Bones and other Musculoskeletal Injuries</b>		
<ul style="list-style-type: none"> <li>• Splint: rigid, padded. Immobilize joints above &amp; below fractures. (<i>Bones</i> above &amp; below <i>joint</i> injury)</li> <li>• Monitor Circulation, Sensation, and Movement of fingers or toes beyond the splint</li> </ul>		
☺ Apply gentle traction-in-line (pulling) to return limb to normal position before splinting. STOP if pain.☺		
<b>Psychology</b>		
<b>For victims:</b> Get victims to safe place, away from disturbing sights (including dead), sounds, and smells.		
<b>Keys to communication:</b> Be direct. Be honest. Respectful physical contact.		
<b>For the team:</b> Take breaks; do not sacrifice self-care; support each other; deep calming breaths.		
<b>Message to help anyone cope:</b> "Take your next step forward. The sun will come up tomorrow."		
<b>ICS – Incident Command System for CERT Led Activities</b>		
<ul style="list-style-type: none"> <li>• Incident Commander (IC) is also Operations <i>Chief</i>. Generally no other ICS Sections are needed. (For larger operations a Logistics Chief finds and assembles supplies.) Functional Group <i>Supervisors</i> are assigned for search, medical, cribbing, etc, as needed.</li> <li>• IC is responsible for Incident Action Plan: (1) What do we want to do? (2) Who is responsible for doing it? (3) How do we communicate with each other? (4) What do we do if someone is injured?</li> <li>• One person can manage up to 7 others; managing 5 is best. Add Units with <i>Leaders</i> as needed.</li> </ul>		
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## CERT Natural Disaster Quick Reference

**What is it:** The CERT Natural Disaster Quick Reference is a two-sided Quick Reference Card to the CERT protocols that you can print and laminate. It can be photocopied onto two-sided paper and laminated at any local copy-center.

**Printing:** If you prefer a smaller copy than prints by default, you can make the Adobe® Reader® print it smaller by clicking **Printer Properties** in the **Print** dialog and selecting a *smaller paper size*. Then select **Scale: Fit to paper** before printing.

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