

# Steele County CERT Field Operating Guide



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Name

# CERT Equipment Checklist

<ul style="list-style-type: none"> <li>•CERT Bag</li> <li>•Water – 2 bottles per S&amp;R team</li> <li>•Non-perishable food</li> <li>•Water purification tablets</li> <li>•Leather work gloves</li> <li>•Goggles</li> <li>•Dust masks</li> <li>•Flashlight</li> <li>•Batteries/extra bulbs</li> <li>•Secondary flashlight/light sticks</li> </ul>	<ul style="list-style-type: none"> <li>•Note pads</li> <li>•Markers</li> <li>•Pens</li> <li>•Duct Tape</li> <li>•Masking tape (2")</li> <li>•Scissors</li> <li>•Crescent wrench</li> <li>•First Aid Kit</li> <li>•Orange spray paint</li> <li>•Triage tape</li> <li>•Utility knife</li> </ul>
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## Before you leave your home....

- Check family to ensure safety**
- Inspect house for damage**
- Inspect utilities and secure as needed**
- Call out-of-state contact at \_\_\_\_\_**
- Get family disaster supplies**

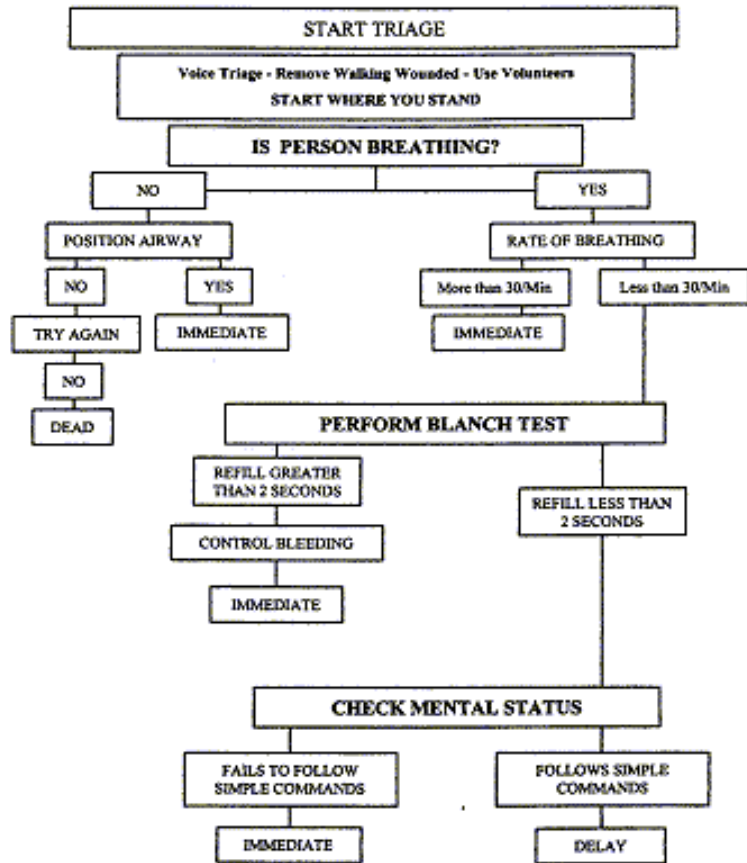
# Water Purification

Water can be purified by three methods – heat, filtration and chemical treatment. All pathogens can be killed by boiling water 10 minutes. For filtration and chemical treatment, use the following charts as guides.

Pathogen	Maximum Filter Pore Size
Giardia and Ameoba cysts	5 microns
Enteric Bacteria	.2 to .5 microns
Cryptosporidium	3 microns
Parasitic eggs and larvae	20 to 30 microns

Chemical	Clear Water 4 ppm	Cloudy Water 8 ppm
Sodium Chloride (household bleach – 5.25%, unscented) shake/stir, let stand for 30 minutes before using	2 drops/qt  8 drops/gal	4 drops/qt  16 drops/gal

# Triage Flow Chart



# Triage in a Disaster Environment

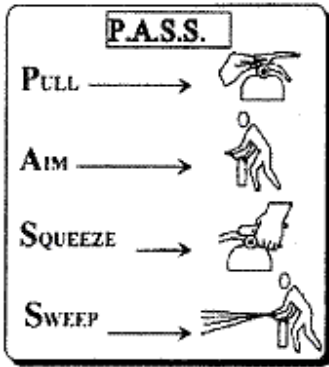
Triage, like other disaster response efforts, begins with size-up. The general procedure for triage in a disaster environment is as follows:

- **Stop, Look, Listen, and Think.** Before you start, stop and size-up the situation by looking around you and listening. Above all, **THINK** about how you will approach the task at hand. Continue to size-up the situation as you work.
- **Conduct Voice Triage.** Begin with voice triage, calling out something like “Emergency Response Team. If can walk, come to the sound of my voice.” Instruct those survivors who are ambulatory to remain at a designated location, and continue the triage operation.
- **Follow a Systematic Route.** Start with victims closest to you and work outward in a systematic fashion.
- **Conduct Triage Evaluation.** Evaluate victims and tag them: I (immediate), D (delayed), or dead. Remember to evaluate the walking wounded. Everyone must get a tag.
- **Treat “I” Victims Immediately.** Initiate airway management, bleeding control, and/or treatment for Category I (immediate) victims.
- **Document Results.** Document triage results for:
  - Effective deployment of resources.
  - Information on location of victims.
  - A quick record of the number of casualties by degree and severity.

This will be very useful information for responders and transportation units.

Always wear protective gear when performing triage, so that you do not endanger your own health.

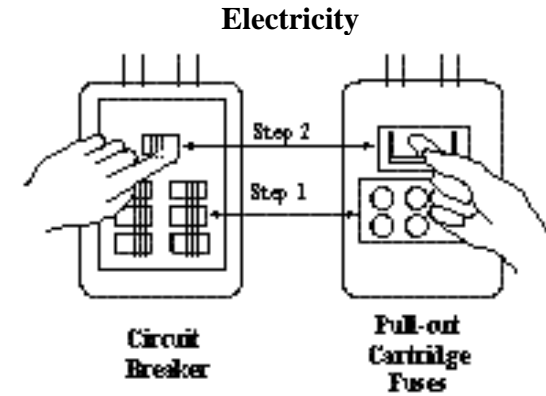
# Operating a Fire Extinguisher



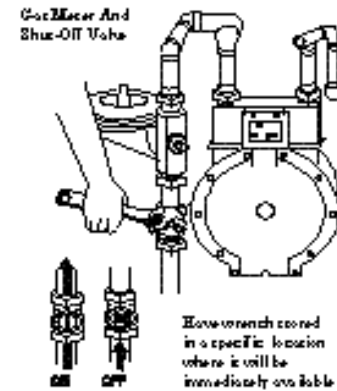
Always operate extinguisher in upright position. As shown in figure, the acronym to remember when operating a portable extinguisher is PASS: Pull, Aim, Squeeze, Sweep. Aim at base of fire

FIRE TYPE	EXTINGUISHING	
	AGENT	METHOD
ORDINARY SOLID MATERIALS 	WATER FOAM	REMOVES HEAT REMOVES AIR AND HEAT
	DRY CHEMICAL	BREAKS CHAIN REACTION
FLAMMABLE LIQUIDS 	FOAM CO <sub>2</sub>	REMOVES AIR
	DRY CHEMICAL HALON	BREAKS CHAIN REACTION
ELECTRICAL EQUIPMENT 	CO <sub>2</sub>	REMOVES AIR
	DRY CHEMICAL HALON	BREAKS CHAIN REACTION
COMBUSTIBLE METALS 	SPECIAL AGENTS	USUALLY REMOVE AIR

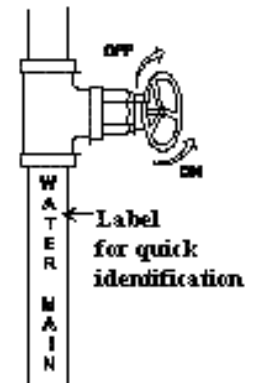
# Utility Shut-Offs



Natural Gas



Water



## Identifying HAZMAT In Fixed Facilities

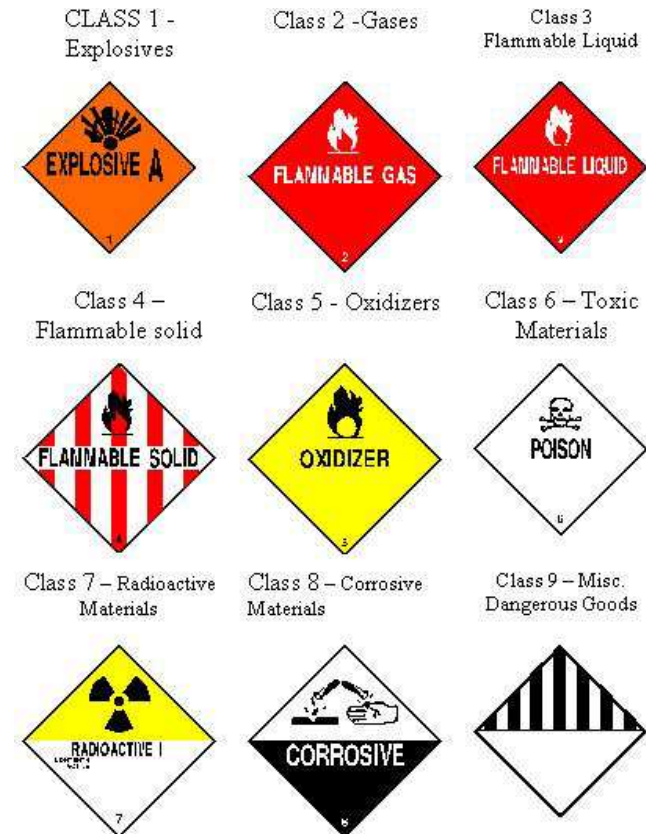
HEALTH	FLAMMABLE	REACTIVE
4 – Too dangerous to enter vapor or liquid 3 – Extremely dangerous – Use full protective clothing 2 – Hazardous – Use breathing apparatus 1 – Slightly hazardous 0- Like ordinary material	4 – Extremely flammable 3 – Ignites at normal temperature 2 – Ignites when moderately heated 1 – Must be preheated to burn 0 – Will not burn	4 – May detonate – Vacate area if materials are exposed to fire 3 – Strong shock or heat may detonate – Use monitors from behind explosion-resistant barriers 2 – Violent chemical change possible – Use hose streams from distance 1 – Unstable if heated – Use normal precautions 0 – Normally stable

Stored hazardous materials are sometimes identified by means of the National Fire Protection Association (NFPA) 704 Diamond System of placards. These placards are located on the outside of buildings at the entrance to storage area. An example of NFPA 704 Diamond is shown in the figure to the right.

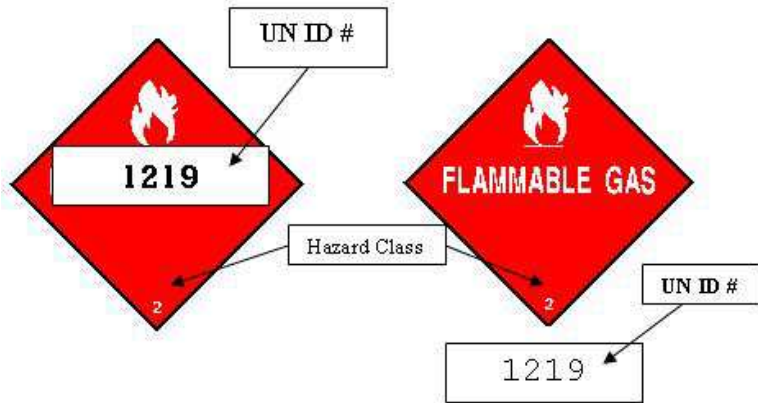


## Identifying HAZMAT in Transit

Quantities of transported materials that meet Department of Transportation requirements are marked with warning placards. The placards are 10 3/4" high and must be on all four sides of the vehicle. Each diamond-shaped placard includes the color, symbol, and name of the class into which the hazard falls.



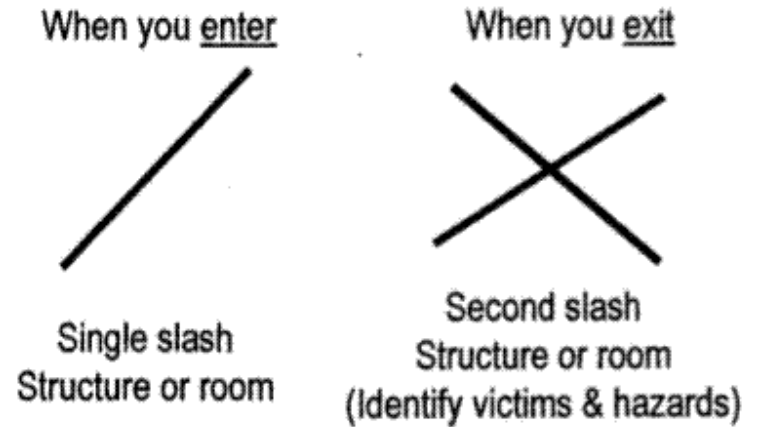
# Identifying HAZMATs in Transit



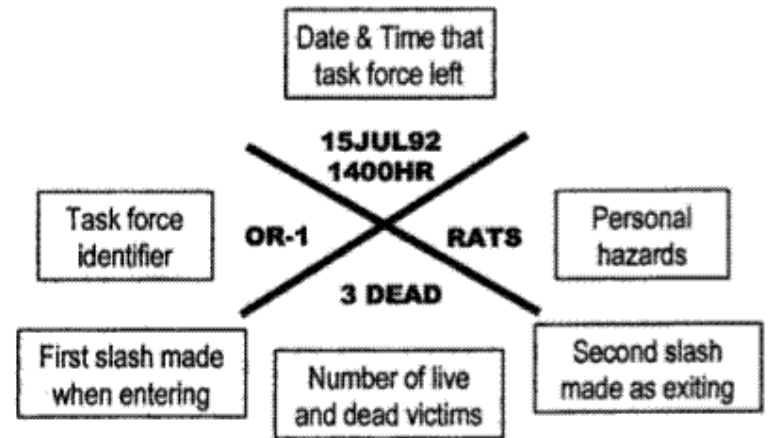
## HAZMAT Procedure

1. Stay upwind.
2. Call 911.
3. If authorities cannot be reached, isolate the area as much as possible.
4. Do not attempt to rescue injured until situation is assessed.
5. Do not walk into or touch spilled material. Avoid inhalation of fumes, smoke and vapors.

# Physical Search – Interior



## Search Assessment



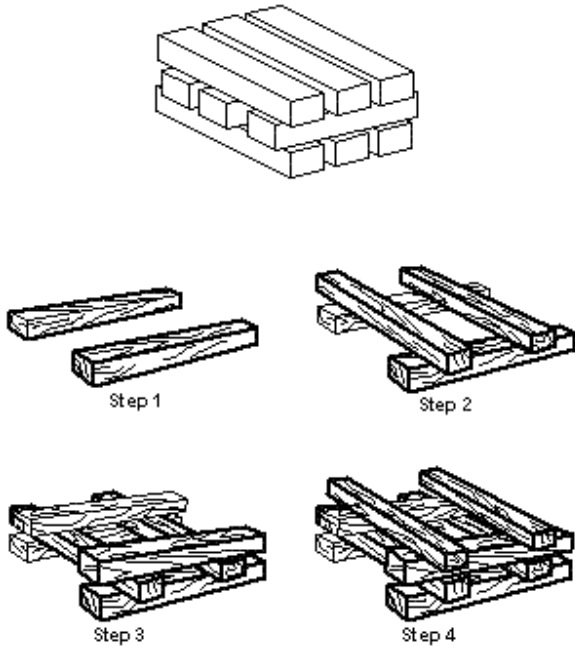
## Physical Search

	Light	Moderate	Heavy
Fire	Shut off Utilkites	Shut off utilites	Show off utilities
	Document	Extinguish small fires	Document
		Document	
S & R	Locate	Locate	Warn others
	Triage	Stabilize(triage)	Gather information
	Tag	Evacuate	Document
	Continue sizeup	Warn others	
	Document	Continue sizeup	
		Document	
Medical	Triage again	Triage again	
	Head-to-toe	Head-to-toe	
	Treatment	Tag	
	Transport	Treatment	
	Document	Transport	
		Document	
Treatment Area	Triage	Triage	
	Head-to-toe	Head-to-toe	
	Treatment	Treatment	
	Document	Document	

## Sizeup Steps

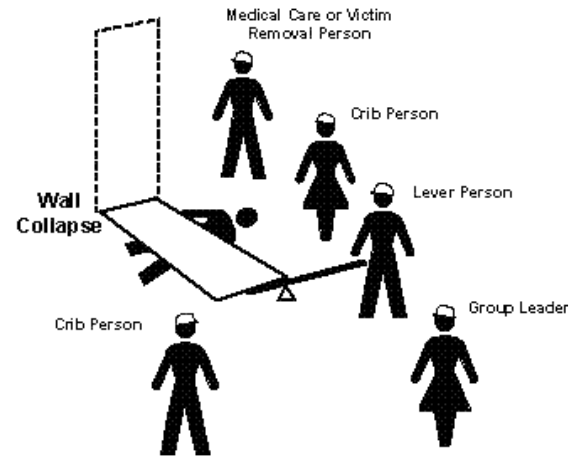
1. Gather Facts
2. Assess and communicate – do 360 walk around.
3. Consider probabilities.
4. Assess your own situation – dabger, training, and equipment.
5. Establish priorities – life safety 1<sup>st</sup>.
6. Make decisions.
7. Develop plans of action.
8. Take action and document.
9. Evaluate progress and adapt to changes.

# 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.

# Arrangement for Leverage/Cribbing Operation



- **Group Leader:** In front of collapse, positioned so that he or she can view the entire operation while remaining out of the rescuers' way.
- **Lever Person:** At the front edge of the collapsed wall and positioned so that he or she can position a fulcrum and lever under the wall.
- **Crib Persons:** On either side of the collapsed wall and positioned to enable the placement of cribbing as the wall is raised with the lever.
- **Medical Care/Victim Removal Person:** Next to the Crib Person who is closest to the victim's head.



# Expedient Flood Training

Filling Sandbags -

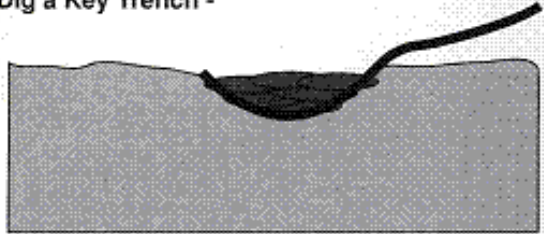


**Yes!**



Do not overfill sandbags - fill bags only half-full for better stacking!

Dig a Key Trench -



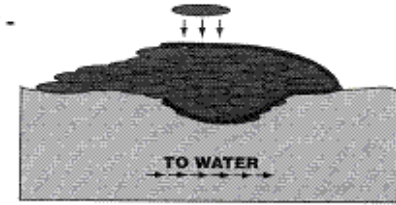
Follow the survey line and dig a key trench 4 to 6 inches deep and two sandbags wide. Anchor poly securely in the trench.

Stack Sandbags -



Do not overfill sandbags - fill bags only half-full for better stacking!

Cap Poly -



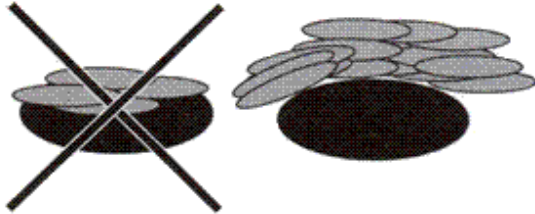
Once the appropriate levee height has been achieved, cap the poly to hold it in place.

## Important Points

- Use extreme caution around electrical equipment and machinery.
- Always lift with your legs, not your back.
- Do not walk behind construction equipment.
- Plan an emergency escape route.

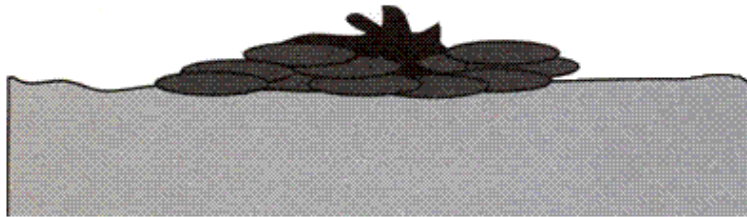
### Manholes

Ring manholes with sandbags and allow the water to eek it's own level. **DO NOT** place sandbags on manhole covers!



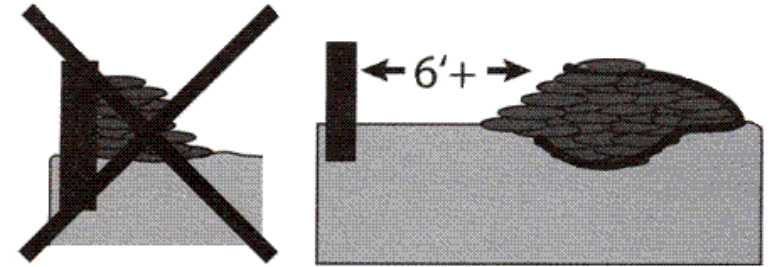
### Sand Boils

Ring sand boils with sandbags to reduce water flow and stop sand and soil movement.



**DO NOT** attempt to completely stop the water flow!

### Foundations



Keep at least six feet from basement and foundation walls!

### Important Points

- Use extreme care when walking in flooded areas.
- Be careful around foundations, watch for cave ins.
- Report broken gas lines immediately.
- Stop immediately if you feel dizzy, have chest pain, shortness of breath, or pain down your left arm. Seek immediate medical attention!

# My Buddy and I put on our...



**Hard Hat**

**Goggles**

**Mask**

**Gloves**

**&**

**STOMP  
STOMP**

**Boots**



**Put your safety first!  
Use a buddy system!**