# Disaster Survival Guide

From "Disaster Survival Seminar".

## **Emergency Preparedness Checklist**

Haı	den	Home. Reduce hazards by securing objects that could fall, fly, shift or swinging during a disaster.			
	□ Bolt pre-1940 buildings to foundation. Install large square washers under 1940 to 1980 foundation bolt nuts.				
		Shear–panel wood-frame foundation ("cripple") walls.			
		Strap Hot Water Heater to wall studs via two straps, one near top, one near bottom.			
		Strap all tall Furniture to walls studs. Secure heavy appliances (e.g., refrigerator) to wall or floor.			
		Secured Table-top objects. (TV's, Computer Monitors, etc. with Velcro straps. Knickknacks with earthquake putty.)			
		Brace furnace (especially if suspended) to prevent movement that could break its gas feed line.			
Water *					
		14 Day Supply of Bottled Water at home. (1 Gal/Person/Day X 14 Days X _ persons = Gallons.) (1 gal. in car.)			
		Hot Water Tank may be an additional source of clean water, <u>if</u> you remember to shut off both gas/power and water to the tank after a quake to prevent new, possibly contaminated water from entering the heater tank. Drain several gallons from the tank annually to remove built-up sediment.			
		Unscented Chlorine Bleach to purify tap water. (Use 8 drops per gallon if water <u>clear</u> , or 16 drops if <u>cloudy</u> .) Add liquid beach, shake and let stand 30 minutes. Or heat unbleached tap water to a rolling boil. Cool & shake.)			
Foo	od *				
		14 Day Supply per Person and Pet at home. (3 Day supply in each vehicle Get-Home/Bug-Out Bag.)			
		Freeze-dried and/or canned food. Use & restock canned food every 6 Months.			
		Manual Can Opener (Electricity may be off.)			
		Special Dietary Needs (Stores may be closed.)			
		Camp Stove or extra propane for home BBQ (use outside)  Gas Meter and Shut-Offs Shut-Off Valve			
Uti	ities	s - Know shut-off points and have required tools.			
		Electricity Service Entrance (Fuse or Circuit Breaker Box). Small switches or fuses first, then Main breaker. Gas Meter. Gas inlet wrench, crescent wrench			
		or Vice Grips.			
		Water Inlet Valve. Ensure hand knob or level will close.			
lmp	ort	ant Documents, Data and Records *			
		Keep important documents in a fire-proof safe/pouch or bank safety deposit box.  o Birth Certificates, Citizenship records,  o Property, Auto, Life, and Medical insurance policies and cards.  o Stock, Bond and CD certificates, Wills and Trust documents.			
		Maintain backups of computer data at out-of-area location or "Cloud" websites.			
		If you have children, ensure school/day care records list all persons who can pick them up.			
	Ме	dications * Extra supply of required prescription drugs as Drug Stores may be closed.			
	Fire	st Aid Kit * (Add Potassium-Iodine 65mg tables for nuclear events.)			
	Sar	nitation Supplies * - Plastic trash can liners in toilet make a latrine. Add Kitty Litter. Bury 1 foot down to prevent flies.			
	Em	nergency Lighting * Solar lanterns. Flashlights, hand crank-able/shakable or extra batteries. Glow sticks. No Candles!			
		e Extinguishers - 2) 3-A:40-B:C or larger. Keep outside or near exits. Shake monthly. 1) "K" extinguisher for kitchen.			
		ilding Evacuation Plan - Identify alternate escape routes from each room. Keep pry-bar in bedroom for stuck doors & storable escape ladder(s) on upper floor(s).			
	Are	ea Evacuation Plan * - Maps with at least two, non-freeway escape routes marked and a Safe-Route Home.			
		sh - \$200 in \$1s, \$5s, \$10s. <b>Trade-ables</b> * - Food. Water. Pain-pills. Mini-bar bottles of alcohol.			
		ulking Shoes *			

<sup>\*</sup> Keep at least a 3-day supply in your personal "Get-Home"/"Bug Out" Bag(s), one in each vehicle. Keep gas tank ≥ ½ full.

### **Action During Disaster**

Biological / HazMat:	Clean up. Seal up. Listen up.
Earthquake - Inside:	Drop, Cover, Hold On away from glass.
- Outside:	Move away from buildings, power lines.
- In car:	Avoiding bridges, drive to side & stop.
Fire (approaching).	Get Ready, Get Set, Go.

Fire (next door)	Pull on. Pull down. Pull away.
Hurricane / Tsunami:	Board Up. Gather Up. Get Up to high ground.
Nuclear:	Get In. Stay In. Tune In.
Tornado: If you hear	open all windows 2". Wrap in blanket & get
"the Train",	in wood-door'ed closet or iron bathtub.

### **Action After Disaster**

- ☐ Provide BASIC Life Saving (B.A.S.I.C.S.) intervention to anyone:
- **Burning.** Tell victim to "Stop, Drop & Roll", while you smother flames with towel, coat or blanket, or quench with water. **Buried.** Remove debris and weight from victim's face and chest.

**Bleeding.** Stop rapid bleeding from: head w pressure <u>around</u> wound, torso by stuffing, limbs w tourniquet (p.6 & 7). **not Breathing.** Look at chest, listen at nose/mouth, feel neck for carotid pulse. If not breathing, check & provide...

A ABCs of Life.

Airway. Clear mouth of any debris, reset any loose dentures. Open Airway by Jaw-Thrust.

If still not breathing, try Chin-Lift-Head-Tilt method.

**Breathing**. If still not breathing but victim has a Carotid pulse, give Mouth-to-Mouth resuscitation. [Blow air in until chest rises. Do every 5 sec. for an adults, every 3 sec. for a child.]

**Circulation**. If no Carotid pulse, give CPR [30 2"-chest compressions, 2 breaths, repeat] until victim revived, or you are relieved or exhausted.

Place any unconscious victims in **High Arm In Neck Expose Spine** (HAINES) position to **maintain Airway**.

**S Size-up Building**. Do a quick lap around inside & outside. If you:

Smell Smoke or gas,

See "X"-cracked, leaning / separated walls, or any collapse (top of page 4),

**Shutoff utilities** (middle of page 4), (preserves water in pipes, water heater)

Shout out for the mobile to leave,

Suppress any small fires if safe to do so (bottom of page 4).

#### Size-Up Victims for:

- **Spinal injury.** If a victim has posterior neck/back midline tenderness, or cannot move or feel a hand or foot, or is unconscious, assume spinal injury.
- **Skeletal injury.** Gently slide your hands down, then press victim's shoulders, arms, chest, pelvis, hips, legs. Deformity or pain → fracture.
- If evacuation necessary, Immobilize any spinal injury w a bulky-item-collar, pad and splint any fractured limb(s).
- C Carry immobile victims out of harm's way. See page 5. Use the carry possible with the number of rescuers available.
- **Search for any missing**. Check closets, cabinets, bathtubs, lean-to voids created by toppled furniture, ceiling collapse. **Sort** for treatment. If **Respiration** >30/min, **Perfusion** (capillary refill) >2 sec. or **Mentally not Alert**, keep warm, treat 1st. If no spinal injury, raise legs & feet above heart. If breathing stops, roll to **HAINES** position.
- ☐ First Aid. Provide to family members. Offer to others, but use exam gloves, mask, eye shield. (Details on pages 6 & 7.)
  Do a Head-to-Toe exam looking for or gently feeling for DOTS (Deformity, Open wounds, Tenderness, Swelling).

Head-Neck [Skull depressions, bruising around/fluid from eyes/ears/nose, pain, tenderness, not alert, blurred vision]
Spinal: [Motor/sensation deficit or tingling] Stabilize head in position found with padding. Ice 20 min. ea hr.

Amputations: Tourniquet, 2" wide, 2" above stump.

Abrasions: Clean w non-peroxide wound-wash, saline or water. Cover w antibiotic ointment & dressing.

Burns: Cool with water till burning stops. Hydrogel/aloe on 1<sup>st</sup> & 2<sup>nd</sup> degree. Cover w gauze. Warm patient.

**Cuts**: **Irrigate** w saline. **Close** w butterfly bandage or SteriStrips. **Cover**.

Dislocations: Support joint above & below in position found. Ice 20 minutes each hour to reduce swelling and pain.

Evisceration: [Exposed organ] Cover w Plastic Wrap & blanket. Keep warm.

Fractures: Limb. Pad and splint in the position found. Ice. Pelvis. Bind tightly with 3"+ wide belt/swath/sheet. Hypothermia: Heat packs to underarms & groin. Wrap in blankets. Warm sweet non-alcoholic drink if conscious.

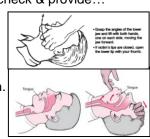
Impaled Object: Stabilize with padding & tape. Don't remove.

Swelling: Sprain/Strain. Rest, Ice, Compress with ACE bandage, Elevate (RICE). Stomach. Bend knees up.

(Cover any deceased and keep in cool place until help arrives. If decomposition starts, wrap in plastic sheeting & tape.)

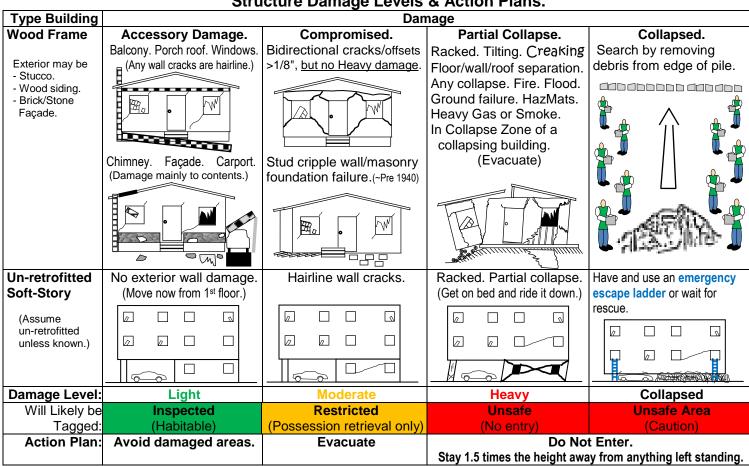
Report your status to out-of-area contact or at <a href="www.redcrossla.org/safeandwell">www.redcrossla.org/safeandwell</a> when possible. (See page 10.)

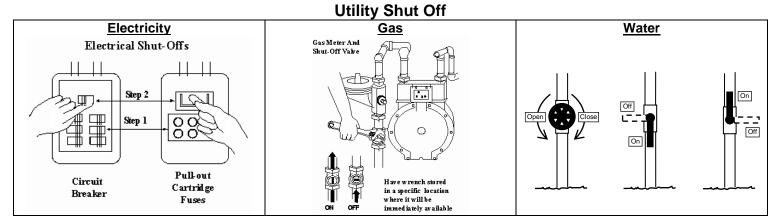
If you have no fire but neighborhood has CERT/NERTeams, lay Fire Extinguisher down outside front door for them.

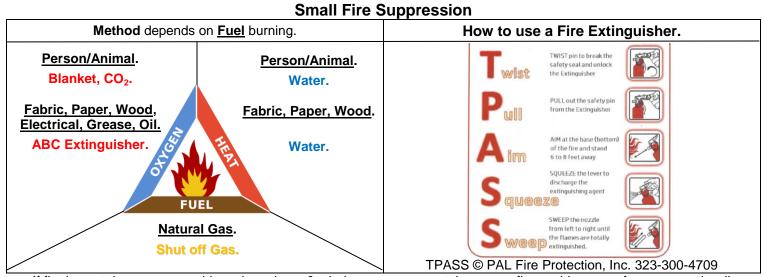




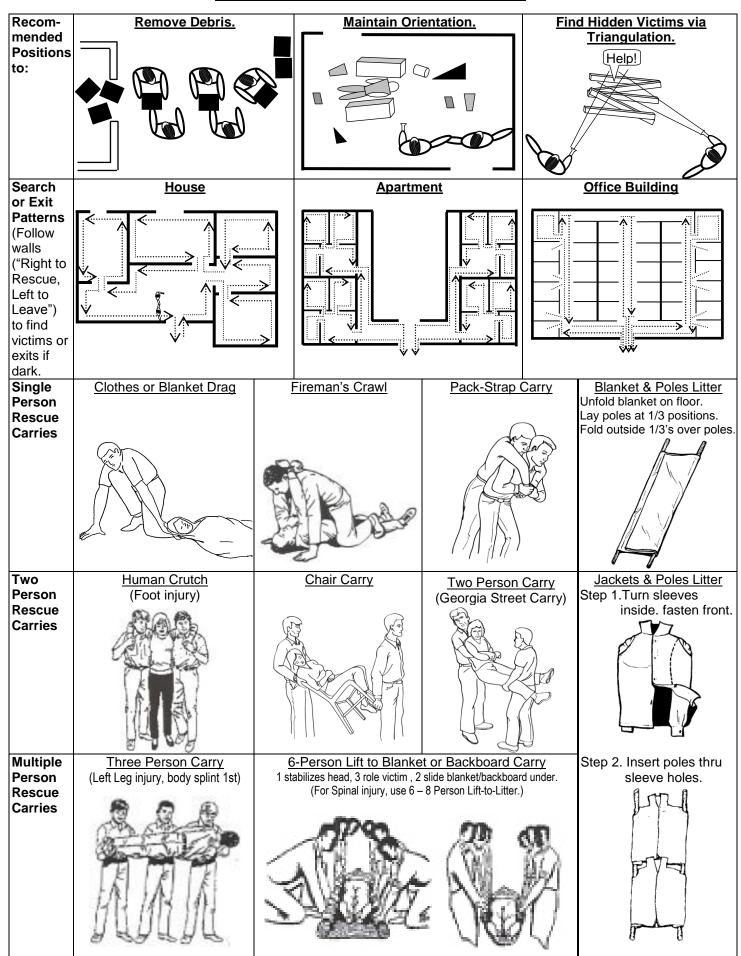
### Structure Damage Levels & Action Plans.







### Find & Carry Victims out of Harm's Way.



### First Aid

(Until medical help is available.)

**Bleeding, Severe** (spurting or flowing blood)

Try to stop in the following order:

- 1. Direct pressure on non-head wound (with hand alone if necessary first, then with dressing) and elevate.
- 2. Pressure Bandage on body wounds. Hemostatic agent on head wounds (Celox, WoundSeal, etc.).
- 3. Tourniquet (CAT, SWAT, swath, tie, belt) placed 2" above wound. For non amputations, apply pressure-bandage to wound & try loosening tourniquet each of 1st 2 hours to see if pressure bandage is now sufficient. If not, retighten tourniquet.

#### **Bleeding, Minor** (oozing blood)

- 1. Remove any debris (dirt, glass shards, etc.)
- 2. Flush wound with a non-peroxide wound wash, saline or clean water.
- 3. Apply antibiotic ointment and non-stick dressing.

If dressings become blood-soaked, do not remove. Apply another dressing over existing.

**Internal Bleeding**. Indicated by thirst or hardness and/or turgidity (swelling) in one or more quadrants of abdomen. Position for comfort with knees pulled-up toward chest. Keep warm and relaxed. Treat for Shock.

**Burns** [Redness = 1<sup>st</sup> Degree. Blisters = 2<sup>nd</sup> Degree. Charred /open skin = 3<sup>rd</sup> Degree.]

<u>Heat, electrical or liquid chemical burns.</u> - Cool burn with clean running water (or immerse in 1 minute intervals if water scarce) until burned area is cool to your touch. Do not remove clothing or jewelry stuck to skin.

<u>Dry chemical burns.</u> - Brush dry powder off then flush with water. <u>Liquid chemical burns (white skin).</u> - Flush until not burning. <u>All</u> - Apply hydrogel or Aloe vera (spray, gel or squeezed/mashed directly from plant) to 1<sup>st</sup> and 2<sup>nd</sup> Degree burns. Do not apply oils or ointments. Cover all burns with thin layer non-stick gauze. Treat for Shock and seek immediate medical care for 2<sup>nd</sup> degree burns covering face, chest, hand, foot, genitals, or more than 10% of body, or if blisters are larger than a quarter, and for all 3<sup>rd</sup> degree burns. Keep patient warm (except area burned) and hydrated.

Cardiac. Chew one 325 mg or four 81 mg aspirin. Use AED if available and trained to use one.

#### Closed Head, Neck (Cervical Spine) and Spinal Injuries.

Skull depressions, rear neck tenderness, tingling or inability to move or feel extremities, changes in consciousness, difficulty breathing or seeing, severe head or neck pain, spinal deformity, fluid from nose or ears, "Raccoon" eyes, seizure, nausea. Immobilize head and neck in position found with pillows or rolled towels. <u>Do not move patient unless life threatened</u>.

#### Dislocated Joints, Fractured Bones, Sprains and Strains.

<u>Dislocated Joint, Angulated Fractures.</u> Immobilize (via support or splint) body above & below joint in position of comfort. <u>Inline Fractures.</u> Pad and splint from joint above to joint below break with SAM splint, "U"-shaped cardboard, magazine, foldable pillow or board, and immobilize the joints above and below with splint or sling. Pad all voids.

<u>Open Fractures.</u> Do not push protruding bone back inside body or irrigate wound. Cover with damp dressing. Keep moist. Ensure feeling, circulation and motor control is same or better after splinting. Elevate and ice for 20 minutes each hour.

**Impaled Object.** Stabilize object with padding & tape. If rapid bleeding not stopped, remove object, pack wound w gauze & apply pressure.

**Hypothermia.** (Body Temp < 95°, shivers, bluish skin, slurred speech, unpredictable behavior, listlessness)
Remove any wet clothing. Insulate from ground & cold weather. Give warm fluids if conscious. Apply heat packs to groin.

**Shock.** If **R**espiration rate is > 30/min. or **P**erfusion (capillary refill) > 2 sec. or **M**entally not Alert, position supine. If this stops breathing, place in **HAINES** position. If Systolic BP drops < 80 (no brachial pulse), raise legs & feet above heart. Keep warm.

**Swelling.** For Fractures, Burses, Sprains, Strains including Closed Head Trauma, Ice for 20 minutes each hour. For abdomen, bend knees toward chest.

#### **General Follow-Up Treatment**

Infection Control. After bleeding has been stopped for 6 hours, clean and re-dressing wounds every 6 hours.

#### **Conscious Patients:**

Pain Killers from the patient's home may be giving to the patient for self-administration.

Allow self-hydration in small amounts slowly. Hydrate burn victims well.

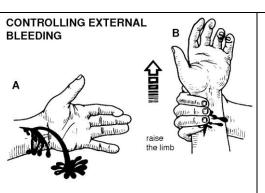
#### **Unconscious Patients:**

Do not attempt to give fluids.

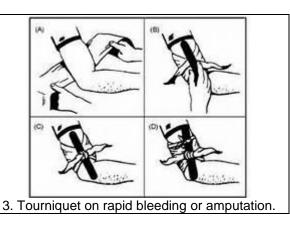
Monitor for breathing problems (Look at chest, Listen at nose & mouth, Feel at abdomen) caused by tongue falling to back of mouth closing off airway. Reopen airway by Jaw-Thrust. If breathing does not restart, try Chin-lift Head-tilt. If unsuccessful, start Rescue Breathing.

If you must leave patient unattended, ensure airway remains open by leaving patient in Left HAINES position (on Left side head resting on left arm, right palm on left shoulder, right knee bent forward on floor/ground, mouth tilted down to prevent choking on any discharge.







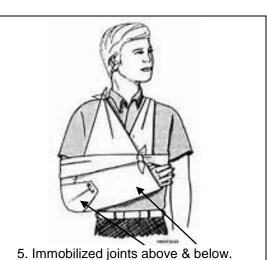




**Splinting Fractures** 





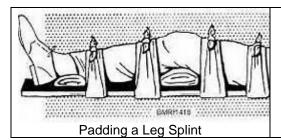


1. Cardboard Splint

2. Pad between splint and limb.

4. Verify Circulation.

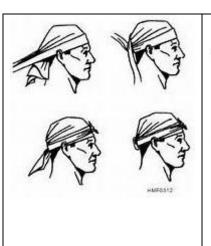
Other Types of Splints.

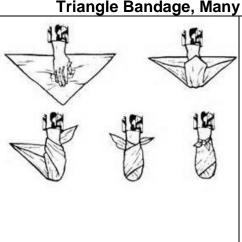


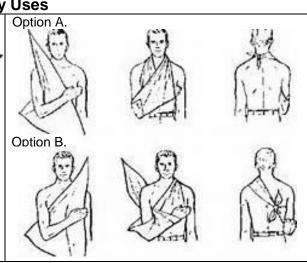




**Triangle Bandage, Many Uses** 







#### Aftermath Survival Skills

#### 1. PERSONAL

Don't Panic, Sweat, Get Cold, Get Tired, Brag about your preparedness.

Do Think, Hydrate, Rest, Hide, Stay Quiet.

#### 2. SHELTER

Secure own home. Tent.

Find ARC Shelter (Try parks, churches, auditoriums, etc.).

Build Lean-to in dry, wind protected, defensible place.

Don layered clothing & pancho.

#### 3. FIRE STARTING (for Heating, Cooking)

Lighter, waterproof matches, magnesium spark generator, battery & steel wool or gum wrapper, magnifying or reading glasses & sun, bow & spindle.

#### 4. WATER

Stored. Hot-water tank. Toilet tank. House pipes. Pool/spa. Ocean, stream or lake. Solar well. Filter, De-chlorinate or Desalinate, Disinfect, Purify. (See next page.)

#### 5. FOOD

Order of own food consumption: 1. Refrigerated. 2. Frozen. 3. Canned. 4. Freeze-Dried. Additional food acquisition:

- 1. Find in abandoned store or home.
- 2. Snare in backyard with thin wire loop-snare. Trap in backyard with Dead-Fall Trap.
- 3. Fish with funnel trap or hook).

#### 6. COOKING

Order of preference to reduce fuel needs and location-disclosing odor:

- 1. Solar oven. Reaches 200 to 300 degrees. Cook food twice normal time. (No fuel required. No aroma.)
- 2. WonderBag. Continues slow-cooking after bring food to boil. (Low fuel usage. No aroma).
- 3. Backyard BBQ. Convenient, fast. (High fuel use. High aroma.)
- 4. Balcony camp stove. (Convenient, fast. Medium fuel usage. High aroma.)

#### 7. SANITATION

Trash bag in toilet/bucket. Add cat litter. Store for pickup or bury at least 1' down. (Latrines attract flies.)

#### 8. COMMUNICATION

Methods: (Most Convenient to Most Reliable):

- 1. Corded Phone connected to non-cable Land line.
- 2. Cell phone Text message.
- 3. Cell phone Voice.
- 4. FRS Radio
- 5. GMRS Radio
- 6. Ham Radio
- 7. Runner

Status to Family & Friends: Call your Out-of-Area Contact. Post on www.RedCross.org/SafeAndWell.

# 9. INFORMATION on road conditions, Food & water locations, Shelter locations, Civil-unrest threats, Transportation 311 (if operating).

Radio broadcasts. Have a battery-powered, solar/crank-rechargeable radio.

**Text messages.** Register Cell number with:

- City: NotifyLA (Sign up at http://emergency.lacity.org/notifyla), or Text "Ready" to 888-777, or @NotifyLA on Twitter.)
- County: Alert-LA (Sign up at http://www.lacounty.gov/emergency/alert-la/)

#### 10. ESCAPE

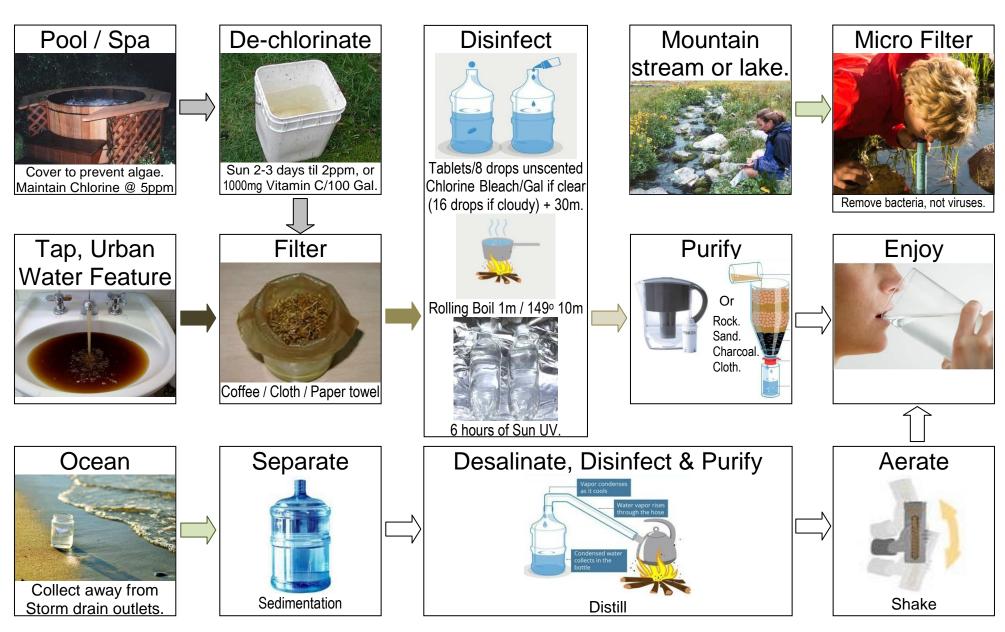
Travel on foot at night by starlight may be necessary if civil-unrest becomes dangerous.

Plan trip in manageable segments from shelter to shelter. Be armed.

# WATER PURIFICATION PROCEDURES.

(In case you didn't stock enough or the City doesn't provide.)

50% - 75% of human body is water. 1% loss = mental & physical performance decline. Thrust = 3% loss. Drink no water, die in 4 days. Drink bad water, die in 3.



# **Emergency Plans and Notes**

Safest, strongest location away from glass, hazardous materials, falling or flying objects at,			
Home:			
Work:			
Building Evacuation Routes (Avoid potential hazards: exits with glass overhead, outside areas near power lines, etc.):			
Home, 1 <sup>st</sup> Choice:			
2 <sup>nd</sup> Choice:			
Work, 1 <sup>st</sup> Choice:			
2 <sup>nd</sup> Choice:			
Hazards, Neighborhood & Area (The Hazard maps below may be helpful in defining remainder of Emergency Plan.)  Underground Pipelines: <a href="https://www.npms.phmsa.dot.gov/">https://www.npms.phmsa.dot.gov/</a> Earthquake Faults, Liquefaction, Landslide Zones: <a href="https://maps.conservation.ca.gov/cgs/EQZApp/app/">https://maps.conservation.ca.gov/cgs/EQZApp/app/</a>			
Emergency Assistance (Enter address and direct phone number of nearest facility, preferably outside of Hazard Zones):  Neighborhood CERT/NERT Command Center (if one):  Hospital(s):			
Fire Station:, Use buzzer or Red phone by front door, or leave note on gate.			
Police Station:			
Out-of-Area Contacts: (Or log your status at <a href="www.redcrossla.org/safeandwell">www.redcrossla.org/safeandwell</a> when possible.)  1			
Out-of-Area Meet-Up Place:  (In case your home area is not safe and contact via phone is not possible.)			
Area Evacuation Routes (Avoid Freeways and major highways.):			
1 <sup>st</sup> Choice:			
2 <sup>nd</sup> Choice:			