

Survival / Earthquake Preparedness

"Chance favors the prepared mind." -- Louis Pasteur

Introduction

The following list contains some essential knowledge and materials to prepare for earthquakes and other emergencies. It was compiled from numerous sources and individuals who are, if possible, listed in the text and gratefully acknowledged for passing down their wisdom. Some of the information is contradictory, so use your best judgment. Of course, reading the list alone will not suffice. Preparedness is not a one-time deal but a constant endeavor and challenge. Further readings and attendance of emergency courses are highly recommended. Lastly, for suggestions email me at mhbachmann@gmail.com.

The six essentials of survival

1. Shelter and dry clothing
2. During Winter (sometimes includes SF in the Summer): Heat / Fire
3. Water
4. Food
5. Medicine
6. Community

Remember: you can survive freezing temperatures with wind-chill for maximally 3 hours, lack of water for three days, and being without food for three weeks (unless you have diabetes or other medical conditions). Therefore, if you are healthy, food should be low on the priority list, not the #1 concern. Train your mind accordingly.

PREPARATION

Indoors: "Secure Your Space"

1. Securely attach bookshelves, cupboards, other tall furniture and appliances to the wall.
2. Retrofit your home for earthquake resilience, secure the foundation.
3. Securely attach the hot water tank to the wall.
4. Flashlights & batteries, candles and matches (for extended power outages).
5. Food (canned and dried) for three weeks: rice, beans, cereal, salt, dried milk, etc.

Outside the House:

1. Store a glass or plastic container with extra water.
2. Attach water purification tablets in a watertight container.
3. Shelter: Sleeping bags, wool blankets, tent
4. Propane camp stove with pots and pans
5. Food (canned and dried) rice, beans, cereal, salt, etc; pans, plates, knives, forks, spoons (get a camping set that combines the three)
6. Foldable shovel for digging latrine
7. Accessible CASH stash
8. Flexible tubing, plastic sheeting and/or tarp (for e.g. gas appliances, water still, rain cover)
9. Cordage (nylon, hemp)

Inside your car:

Prepare a container with:

1. LED flash light and batteries (also for cell phone)
2. Water filter (buy in camping store, e.g. REI; filters out bacteria, parasites).
3. Set of clothes for each family member. Include wool socks for winter.
4. Emergency blanket (reflective coating), cheap 100% wool blanket (obtain at surplus store)
5. Small tent

6. Medical supplies, bandages, toiletries (foldable toothbrush, travel pack of soap and toothpaste)
7. Food: Powerbars, dried nuts and raisins, canned food (also for pets), can opener
8. Emergency radio
9. Knife, Swiss Army knife
10. Tools: wrench (to turn of main gas valve), voltage tester/screwdriver

Notes:

1. Batteries in LED flashlights last much longer due to the reduced energy requirements for the LEDs vs. regular bulbs.
2. Wool keeps you warm, even when wet. 'Cotton kills' as any mountain climber will tell you because when cotton becomes wet from rain or sweat, it loses its airpockets and no longer insulates.

First Aid

Take an emergency responder and first aid class: http://en.wikipedia.org/wiki/Certified_first_responder.

Community:

1. Meet with your family and friends, and with your neighbors
2. Agree on a contact person outside of the state that family members and friends can call.

AT THE MEETING POINT

1. Once outside, locate the main gas valve, then turn it off using a wrench.
2. Pre-program safety related phone numbers into your cell phone: friends, family members, neighbors, etc.;

Include:

- a. State of California emergency numbers
- b. work-related numbers

3. Locate emergency supplies:
 - a. RED CROSS bag or emergency kit/backpack (see below)
 - b. water, and water filter
 - c. shelter (tent, makeshift shelter)
 - d. emergency radio (pref. solar with hand crank, and USB-cell phone charger)
4. Locate spare house & car keys
5. Emergency sources of water:
 - a. hot water tank of your home (if still standing)
 - b. water in the car that is used for spraying the windshield (unless it contains detergent)

Notes:

1. Save your batteries; use telephone and radio sparingly; if possible, send text messages rather than call by phone.

RED CROSS Bag

duct tape
rope
plastic bags
toilet paper
knife
mask
gloves
paper & pencil
First Aid Kit

Master List of information (see below)

Emergency contact telephone number (out of town)
Telephone numbers of friends, family members, neighbors, et al
Location of spare house keys & car keys
Location of gas turn-off, wrench

Tips for creating an emergency safety kit

<http://www.cnn.com/2001/HEALTH/conditions/10/25/emergency.kit/index.html>

October 25, 2001 Posted: 4:19 p.m. EDT (2019 GMT)

[Rearranged and edited]

Safety kit

"During the first few hours or days following a disaster, essential services may not be available," reads the Web site for the Federal Emergency Management Agency. "People must be ready to act on their own."

One way to act is to create an **emergency kit to keep at home**, for use in case you have to leave your house quickly. It should be kept in a place that's easily accessible, and it should have supplies to last at least three days, including:

- A **first-aid kit**, which includes bandages, tape, scissors, tweezers, needle, aspirin and other over-the-counter medication, rubbing alcohol and antiseptic
- Two quarts of **water to drink** and two quarts **for sanitation** for each person every day
- One extra **warm outfit** for each person; include rain gear and footwear.
- **Temporary shelter**, sleeping bags
- A battery- or solar-powered, hand-crank **radio** (and batteries)
- **LED flashlights**
- Spare **car keys, tools, matches**,
- Backup **eyeglasses**, hearing aid
- **Medications**
- **Sanitation supplies** (toilet paper, band aids, female hygiene items)
- Copies of important family **documents**,
- Non-electric **can opener**
- small **knife** / Swiss Army knife
- Supplies for pets, including food and medicine
- A supply of **nonperishable food** (canned meat, fruits and vegetables, health food bars, canned or powdered milk and juice)
- **Cash**

Away from home

There's a chance if emergency unfolds, it will happen while you're away from home. That's why having an emergency kit in the trunk of your car is a good practice.

Experts also say families should have a plan worked out on what to do if an emergency unfolds while they're away from home. Recommended in the plan:

• **An outside contact person.** Don't rely on cell phones; they didn't work in New York during the September 11 terrorist attacks.

Instead, have a designated contact person out of your area for family members to call on a hard line and relay messages to each other if they are separated. Families should also have at least two designated meeting spots -- one near home, and one away from home, in case the area where you live is inaccessible.

• **Planned emergency escape routes.** These should be known by family members; safety experts don't recommend back roads or shortcuts, which might be closed or affected by the emergency.

Finally, if you already have an emergency kit in your house, you should check its contents to make sure they're still usable. Items like packaged food, water and batteries need to be changed out periodically

Books:

Howard Godfrey

John Lust

Stephen Harrod Buhner

Emergency Preparedness The Right Way (Paperback)

"The Herb Book"

"Herbal Antibiotics"

Tracker Mini Emergency Kit

by Charles "Doc" Garcia, Director, School of Traditional Hispanic Herbalism, Richmond, CA

1. small knife
2. 1" gauze pad,
3. 2 band-aids,
4. 2 Tylenol,
5. 3 fishing hooks,
6. 3 sinkers,
7. 1 cotton ball (wrapped in part of a plastic bag for waterproofing),
8. duct tape (1" x 18"),
9. 10 strike anywhere matches dipped in paraffin,
10. 1 Boy Scout Hot Spark,
11. 60 feet dental floss,
12. 1 large sewing needle, 1 medium sewing needle,
13. safety pin,
14. large paperclip,
15. 1 rubber band,
16. 1 small compass (I got this from a drug store. They're attached to watch bands),
17. 1 small vial of iodine (for water purification and for wounds. It's the Tabasco bottle in MRE's),
18. 1 foot square of aluminum foil,
19. pieces of wet weather fire starter (made from dryer lint and wax)
20. 1 small plastic bag [Note: the original list from "Doc" Garcia listed a condom as the 20th item, which, he wrote, can be used for the obvious purpose OR as a canteen, but NOT for both. You decide whether a condom or a plastic bag is your preferred choice.]

Notes on Food, Water

by Charles "Doc" Garcia, Director, School of Traditional Hispanic Herbalism, Richmond, CA

We prefer canned foods, which do not have to be rehydrated.

Corn, string beans, mixed veggies, tomatoes - we can them ourselves.

Pastas and beans and rice.

Mega-vitamins.

Stews are prominent in our supplies. Gatorade is important.

Jerky, beef and turkey.

Instant coffee and tea bags.

Sugar and creamer.

Hot chocolate and instant apple juice.

Pineapple.

Broth, chicken and beef.

Salsa. Hard taco shells.

Water purification tablets.

Matches. (I'll be damned if I have use a bow drill.)

- Three weeks worth of water for four people

- Water Filter (obtain at REI, or other outdoor sports stores)

Herbal Medicine

Tinctures:

1. horsetail: to stop bleeding from minor cuts

2. calendula: anti-inflammatory, for minor cuts

Wound Salve: Calendula-st. john's wort-olive oil-beeswax (e.g. "Wound Aid" by Moon Valley Company)

Essential oils: thyme or oregano (for external use in case of skin infections)

Garlic pills

Grapefruit seed extract (for water purification; externally for infections)

Band aids, compresses and tape

What to do during and after an Earthquake

Doug Copp is the rescue chief and disaster manager of the American Rescue Team International (ARTI). Here is his advice on how to survive an earthquake.

- 1. Almost everyone who simply 'ducks and covers' when buildings collapse ARE CRUSHED TO DEATH. People who get under objects, like desks or cars, are crushed.**
2. Cats, dogs and babies often naturally curl up in the fetal position. You should too in an earthquake. That position helps you survive in a smaller void.
Get next to an object, next to a sofa or other large bulky object that will compress slightly but leave a void next to it.
3. Wooden buildings are the safest type of construction to be in during an earthquake. If a wooden building does collapse, large survival voids are created. Brick buildings will break into individual bricks, and will cause injuries but fewer squashed bodies than concrete slabs. Concrete slab buildings are the most dangerous during an earthquake.
4. If you are in bed during the night and an earthquake occurs, simply roll off the bed. A safe void will exist around the bed.
5. If an earthquake happens and you cannot easily escape by getting out the door or window, then lie down and curl up in the fetal position next to a sofa or large chair.
6. Almost everyone who gets under a doorway when buildings collapse is killed. If you stand under a doorway and the doorjamb falls forward or backward you will be crushed by the ceiling above. If the door jam falls sideways you will be cut in half by the doorway.
7. **Never go to the stairs.** The stairs swing separately from the main part of the building, so the stairs and remainder of the building continuously bump into each other until structural failure of the stairs takes place. The stairs are a likely part of the building to be damaged. Even if the stairs are not collapsed by the earthquake, they may collapse later when overloaded by fleeing people.
8. **Get near the outer walls of buildings or outside of them if possible.** It is much better to be near the outside of the building rather than the interior. The farther inside you are the greater the probability that your escape route will be blocked.
9. People inside of their vehicles can be crushed when the road above falls in an earthquake and crushes their vehicles. Get out and lie in the fetal position next to your vehicles.
10. Paper does not compact. Large voids are found surrounding stacks of paper.

Websites for Earthquake and Emergency Preparedness

U.S. Government - FEMA

<http://www.ready.gov/>

CDC Emergency Preparation

<http://www.bt.cdc.gov/>

California Emergency Management Agency

<http://www.oes.ca.gov/>

<http://quake.abag.ca.gov/>

USGS Earthquake Preparation

<http://quake.usgs.gov/prepare/prepare.html>

American Rescue

<http://www.amerrescue.org/quakprep.htm>

Dare to Prepare

<http://www.daretoprep.org/>

Tom Brown Jr.'s Emergency Essentials Checklist

By Tom Brown, Jr

Dear Friends,

All of you who have been through my classes know that I am not an alarmist. Instead, I am just the opposite. To me, blizzards, floods and all the rest are not disasters but adventures. I always ask, "What are you going to tell your grandchildren 25 years from now?" Are you going to tell them about the traffic jam that you got caught in on the commute home, or are you going to tell them of the great blizzard or flood that you lived through".

People seem to worship safety, security and comfort as a god, but what we remember the most in life are the intense times that we were not safe, secure and comfortable. These are the times we become the most alive, and these times are not just remembered, but relived. When it comes to emergencies, there is one saying that comes to mind. Be prepared. But be prepared sensibly.

What follows are some suggestions of what you can do to be sensibly prepared for emergencies. Remember, though, that your supplies need to be close at hand when an emergency occurs. This means remembering to have such items in your car, your backpack and your home. They do you no good if you take a hike away from camp and your backpack, and an emergency occurs far from your supplies.

Food

First, put away a supply of nonperishable food that would last you two weeks or more. This way if there is a disruption in the food service deliveries to markets, you will not be affected. Buy things you use anyway, just a little extra. Rotate your stock to maintain freshness.

Water

So, too, should you stock up on bottled water. Make sure you have your own supply to fall back upon.

Important Documents and Financial Records

Now is a good time to make sure you have all your important documents ready for any possible emergencies.

Emergency Money

Many times a little extra cash can be a big help when something breaks down - whether its the ATM or your car. That extra cash can really come in handy if it is stashed away and only used in an emergency.

Sufficient Medications

It is best to make sure that if you are taking any medication on a regular basis, that you have enough on hand, not only for yourself, but for all members of your family.

First Aid Kit

Another suggestion is that you have your first aid kit well stocked, along with many over the counter medications, vitamins and supplements that you may need.

Gasoline for Automobiles

I would also advise that you fill your automobile's gas tank when you have sufficient warning of a hurricane, snowstorm etc. Always keep it as full as possible when potential threats appear.

Heat Source

It is also important to consider the possibility of heat and electricity being disrupted. If you have a standard outside grill, make sure that you have enough charcoal or propane to allow you to cook. Remember; NEVER bring the grill inside the house, basement or garage. There is an extreme danger of carbon monoxide poisoning. If you have a wood burning stove or fireplace, make sure that it is clean and in working order. Also, make sure that you have enough firewood on hand to out-last any outage. If

you don't have a fireplace or wood stove, you may want to invest in an alternative and safe heating source such as a kerosene or propane stove designed for safe use indoors.

Extra Ice

I would also suggest that you get a large ice chest or cooler and fill it with ice as a possible storm or emergency approaches, just in case the refrigerator loses power. If you store your ice in sealed freezer bags, your ice can be an emergency source of water, too.

Some people have also invested in a small generator, but remember these are for outdoor use and are not to be brought indoors.

Light Sources

Remember to have candles, flashlights and kerosene lamps on hand. As always, exercise extra care with candles and lamps indoors. Carefully think through and consider fire safety and ventilation issues.

Extra Batteries

Have plenty of extra batteries on hand.

Battery-Powered Radio

Have a good battery operated radio with you.

Entertainment

I also suggest that you have board games, playing cards, books, puzzles and other reading material available. Who knows, a power outage may reinvent real family conversations.

Pet Supplies

Don't forget those other important members of your family, your pets. Consider their food and water needs, too. If any of your pets are taking medications, be sure you have enough on hand for them.

Family Emergency Planning

It is important that each member of your family knows where all of the emergency gear is stored and how it works. This is especially important for very young children who may be upset with any disruption in normal life. My wife Debbie suggests that you make a game of teaching them how to deal with any disaster. For instance, play a game of turn out the lights one evening, gather the family together in the living room and talk or read by candle light or flash light. This way they get used to the strange surroundings and conditions and will not easily be frightened during the time of a real disaster situation. Remember; be prepared means for your children too.

Finally, not to push my own publications and books, but I would like to suggest that you read, my book on City and Suburban Survival. By just reading this survival guide you will gain so much confidence and positive mental attitude, even if you never use the things you learn. You can find it at many libraries and order it through most bookstores.

Most of all, treat any real or imagined threat as an adventure, not something to agonize over. Remember when you were a child and couldn't wait for a blizzard to give you a day off from school? Well, recapture that feeling and an emergency might become an adventure.

Tom Brown Jr. is the author of "The Tracker" and of Tom Brown's Guides to Wilderness Survival. He directs the Tracker School in New Jersey.

<http://www.trackerschool.com/>

Relevant Books:

"Guide to City and Suburban Survival"

"Field Guide to Living with the Earth"

"Guide to Wild Edible and Medicinal Plants"

"Field Guide to Wilderness Survival"

Grab-and-Go 1-Person 3-Day Complete Emergency Kit (801)

LifeSecure Emergency Solutions
lifesecond.com

Contents:

For protection and shelter:

- (1) N-95 respirator (face mask)
- (1) Emergency thermal blanket
- (1) Emergency poncho
- (1) Roll plastic sheeting
- (1) Roll duct tape

For turning off utilities and other tasks:

- (1) Multifunction tool [needle nose pliers, regular pliers, wire cutter, file/cutter, flat file, pointed screwdriver, mini-screwdriver, small screwdriver, screwdriver, Phillips screwdriver, can opener, bottle opener, punch, knife blade]
- (1) Pair leather-palmed work gloves

For communication and light:

- (1) metal whistle with lanyard
- (1) emergency AM/FM radio with two sets of batteries
- (1) flashlight with two sets of batteries
- (2) 12-hour light sticks
- (1) LED Safety Signal
- (1) Notepad
- (1) Pen
- (1) Waterproof document pouch

For hydration and nutrition:

- (6) 4 oz. emergency water pouches [5-year shelf life – U.S. Coast Guard approved]
- (1) 2-gallon water bag for carrying, purifying and storing water
- (50) water purification tablets
- (1) 2,400-calorie food bar (12 individually wrapped 200-calorie portions) [5-year shelf life – U.S. Coast Guard approved]

For medical, hygiene and sanitation needs:

- (1) Personal First Aid packet
- (1) Personal First Aid kit
- (1) First Aid Guide
- (3) Biohazard bags
- (1) Toilet paper roll
- (6) Moist towelettes

For storage and easy transport:

Emergency preparedness supplies are packed in a rugged heavy-duty backpack with sued leather bottom.

EARTHQUAKE PREPARATION ADVICE - American Rescue

<http://www.amerrescue.org/quakprep.htm>

Each of you should make some preparation just in case a major earthquake, tornado or hurricane does strike your area.

It is very important to not overreact following such a major disaster!

There have been dozens of harebrained suggestions from various well meaning groups put forward. We wish to offer you some simple, common sense emergency procedures and reasonable preparations which everyone living should make.

Clipboard(s)

On the top of our list is at least one a legal size clip board with paper and pen or pencil (attached by a string). A red, permanent ink, felt tipped marking pen attached by a string is also necessary for your clipboard. (Carbon paper recommended) and a can of international orange spray paint! The spray paint is used to paint a large arrow on the side of the building/residence that points to the location of the clipboard so that rescuers can find it. On the top sheet of paper create a form with headings such as:

The Dwelling's Address: 523 Your Street
Preliminary Search: Yes/No Searched and Cleared: Yes/No To be Searched: Yes/No
Owner's name: John Smith Address: 733 His Street
Contact #: (just in case a phone is working someplace) 212-555-9112
Principal Occupant's name: Your Name
Total number of occupants in dwelling: People (and pets)

The following is a list of residents at this address:
(List of each person resident, your name first, at your location along with their ages)

Name	Age	Relationship	Present	Location	Condition
John Q. Public	49	owner	Local High School Shelter		OK
Mary Public	46	wife	Municipal Hospital		Broken leg (treated)
Timmy Public	16	son	unknown, was at swim class		Unknown

Condition of Utilities: Gas: ON OFF
 Oil: ON OFF
 Hydro: ON OFF

Additional Notes and Instructions: (sample use follows) Timmy, we are all right. I am at the High School Shelter and Mom is at the hospital with a broken leg. She is doing well. Come to the school. Dad Aug., 12, 1993 - 10:32 a.m. - Building verified and cleared by VUHR Cliff Henry, VUHR Team etc.

The clipboard and form serve the following purposes:

- It provides any rescuer with pertinent information on the occupants, their condition and where about.
- It allows rescue teams to pass information to other rescuers so that the dwelling is not searched a second or third time thus wasting valuable search efforts.
- It provides information to friends and relatives who may have joined in the search for you.
- By using carbon paper it provides authorities with a removable record which may be taken to the - Disaster Command Center and added to a database.
- Can you think of any more purposes this form would serve?
- The red marker will allow a rescuer to place a check mark on the paper to show the dwelling has been cleared.

Radios and Flashlights

For one thing, you won't need a flashlight or radio inside a basic disaster (earthquake, tornado or hurricane) survival kit. One radio for 200 persons is plenty. A century ago there were zero radios. News will travel from person to person. Radios and a flashlights both need batteries, which run out quickly, have a short shelf life, etc. And don't forget, there probably won't be any stores open that can sell you more new batteries after a major disaster!

If you end up at the refugee center they will probably have an emergency power source such as a small portable generator. If not, why not just sit in the dark to talk in the evenings. If you feel that must have a light source we would recommend **chemical light sticks**. They are cheap, light weight, readily available and have a

long shelf life. One half dozen six inch light sticks! Each will burn for 12 hours (actually, they provide light for a much longer period of time). At least one should be red! You will use the red stick if you are trapped or pinned inside and can see outside. Once you have activated the red light stick a rescuer will see that there is someone in need of assistance.

There's an excellent chance, after a major disaster, that **martial law** will have been declared and you won't be going out at night. In this eventuality most activities requiring light will be done during the day when the sun was out. You prepare for night ahead of time. Depending on how you look at it, and having a positive outlook is very important during such trying times, losing electricity for a few days could actually be a blessing in disguise.

Be Prepared: Have Disaster or Quake Kits, and Be Prepared to Leave

One of the kits and you should have at least one per household member, should be just inside the front door or near a window in your bedroom. A chemical light stick should be near your bed and readily accessible, not buried down inside your long term survival kit. A good location might be to place one or two between the box spring and mattress on each side of the bed.

A major disaster can happen anytime, day or night. So you have a 50% chance that a disaster hits it will happen during darkness. And if you sleep 8 hours a night then there is a 33.3% chance that you'll be sleeping. 66.7% chance that you'll be awake. How many hours a day are you at work or school? You should have one of our recommended disaster kits there as well. You probably won't be killed or maimed in a major disaster! Look at the statistics. It's kind of like flying. Some people are afraid of flying, but statistically speaking - flying is the safest way to travel. So let's make a reasonable level of general preparation, then we can go about our lives.

In any major disaster people may be killed immediately. But many more will die in the confusion of the aftermath possibly due to occurrences such as fires. Disorganization, lack of communication, no water, screaming people trapped in building rubble will all add to this confusion. People will rush to the large parks, where the authorities said they should go.

Disasters are horrible! People will die. Rumors start. Looting can begin with the breakdown of law enforcement. When regular authority breaks down people believe rumors according to their prejudices. Consequently ethnic people might be killed by insane mobs trying to stop the looting. International rescue teams have been accused of being looters in efforts to prevent their saving lives or to cover up government corruption and mistakes. In a major disaster, the world as you know it, will cease to exist and you must be prepared both mentally and with personal survival kits.

If you live or are in a big city when a major disaster, such as an earthquake, occurs try to get some personal identification like your passport, some money, clothes, etc., and walk out, if it appears possible to do so. A person can walk pretty far in one day with relatively level terrain, roads to follow, etc. No problem. At 4 miles/hour an uninjured person could walk a fair distance in a day or two.

There are several reasons to try to **leave the quake area** - and to **help others do the same**. In the Kobe quake we saw the almost total lack of personal initiative on the part of average Japanese citizens. Why should the locals need to be told what makes sense? Tourists driving in, blocking roads so that relief vehicles couldn't get through. Lack of coordination in food delivery. Little effort to search for trapped persons until a couple of days had passed... Unbelievable! A whistle on your pajamas? A pick ax and hydraulic jack would be more appropriate. What is the most reasonable level of preparation? That's our focus. We can't stop the quakes from happening. But we can respond quickly and help others to escape the danger. An important note is in order: the Japanese government wants everyone to go to the large city parks. But if law & order breaks down (followed by lack of sanitation), remember what has happened in history. -Incredibly, just following the Kobe Quake some Japanese news reports said that "foreigners" were looting. In fact, one story told that some foreigners were coming into the area to steal. That's just what "pre-judging" people need to hear! Actually I don't doubt the validity. But the consequences could be disastrous for us minority foreigners. Guilty until proven innocent.... This writer's advice is to make a few newfound friends and walk out to less congested areas, if possible.

The **ARTI recommended Quake Kit** is cheap, flexible and long lasting. Let the department stores sell their expensive wares. We're going down to the neighborhood shops for our kits. The main part of this kit should cost you a few dollars! That's all. For that amount of "insurance" you are reasonably prepared for most quake-related danger. But if a large cabinet crushes your leg or a chunk of concrete lands on your head then even the most expensive kit in the world wouldn't do you a bit of good, would it?

The essential items are:

- a dozen or so disposable dust masks - there will be a lot of dust and airborne bacteria from decaying bodies
- 1 roll of toilet paper,
- 2 candles,
- matches,
- 4 safety pins,

- a pen,
- a small knife,
- \$20.00 (or more) in cash,
- 3-5 meters of strong string,
- spoon,
- plastic bowl with lid,
- 1 liter of bottled water and a water filtration straw,
- 1 package of dry biscuits or crackers.

Heavy winter clothes? Depends on your climate, but maybe a sweater and plastic poncho are a good ideas as well.

These items are put together, wrapped inside 2 T-shirts, then wrapped in a waterproof plastic bag or 4-5 plastic shopping bags. All of this is minimum. And except for the cash and T-shirts it should cost you very little to put this all together.

The idea is to be able to survive the first day or so without too much discomfort given the overall situation. You must make 2 kits. One for home and the other for your primary work or school location. Earthquake preparation kits should be kept: Kit #1 - in trunk of car; Kit #2 - in a plastic sealed garbage can in a hole in backyard filled with sand and covered by a couple of inches of sand on top. Statistically speaking, this would be pretty good preparation. A compact, durable kit which will last for several years.

Think about this - the San Francisco quake happened at 5 p.m. Most people weren't home. So their elaborate kits at home were buried or at least inaccessible. We remember seeing people returning home a few days later - to retrieve (among other things) their emergency kits. You just can't completely prepare for the Big One.

In an emergency situation you must be innovative. This is paramount! Russian author Alexander Solzhenitsyn once wrote an entire book (while in prison) on onion skins. What can you do with a whole roll of toilet paper? You could write on it, make temporary flags, clean a wound, wrap food for later, blow your nose, twist tightly when wet, then dry, to make a crude wick, etc. And if there's no water you can't flush the toilets or wash your hands. How will you keep clean? Add a large container of 'pre ned towelettes' to your survival kit. Sealed, they keep for years. Believe me, there is nothing like wiping your face with one when you've been coated in dust and grime for hours or even days at a time.

This is important - a million people, with limited sanitation! In 3-4 days diseases will begin spreading. Keep as clean as possible.

There is a possibility of heavy smoke from fires. Tie one of the T-shirts around your mouth and nose. If possible, a wet T-shirt. Your 2 T-shirts double as towels or they could be torn into strips for either a tourniquet (to stop the blood from a gaping wound) or a splint. With toppled buildings nearby wood for splints should be readily available.

A broken arm or dislocated shoulder? Use those safety pins (or even heavy staples, glue, etc.) to make one T-shirt into a temporary sling. Affix the hem to the neckline. Put the T-shirt on and slip the arm into the "sling" made by the material.

And you really should add a few more things. But at least have the water, biscuits and a few other things on hand. To make 2 kits the cost is negligible. And it's all useable, long lasting stuff. Your school/office based kit should have extra prescription medication, contact lens cleaner, sanitary napkins, etc. Imagine that you can't go home and no stores will be open for a few days.

Part of your kit might include a few cans of cola. It has a long shelf life and carbohydrates. Chocolate though won't last through one August. As we stated earlier you want nothing that needs batteries. But then a deck of cards or flask of whiskey would be useful. Whiskey is a pain killer, friend maker, and crude sterilizer. How about one of those paperback books that you've been planning to read someday. Do you smoke? Unless you plan to quit for a few tense days you may want to add a few packs to your kit.

Without a change of clothes and probably no razor you won't win any beauty contests, but then who wants to carry extra baggage either. Realistically ... you'll probably be aiding the injured in some relief center rather than just saving your own skin. You'll help with foraging, traffic control, caring for the injured, etc. Don't plan to be alone nor completely outside. But this depends largely on where you live.

For disaster planning bureaucrats in many countries think they have it down pat. A lot of wisdom goes into their decision making. But when the unexpected happens it seems that no one knows what to do unless they're told. If and when a tragedy does strike ... let's help our neighbors and show them how to make quick decisions - that save lives.

Emergency Radio

Features	SOLARLINK			MICROLINK		VOICELINK	CLASSIC	
	FR600	FR500	FR360	FR160	FR150	FR1000	FR250	FR300
AM	✓	✓	✓	✓	✓	✓	✓	✓
FM	✓	✓	✓	✓	✓	✓	✓	✓
NOAA Weather	✓	✓	✓	✓	✓	✓	✓	✓
S.A.M.E.	✓	✓	✓	✓	✓	✓	✓	✓
Shortwave	✓	✓					✓	
GMRS						✓		
Digital Tuner	✓		✓					
Crank Power	✓	✓	✓	✓	✓	✓	✓	✓
Solar Powered	✓	✓	✓	✓	✓			
Cell Phone Charger	✓	✓	✓	✓	✓	✓	✓	✓
LED Flashlight	✓	✓	✓	✓	✓	✓	✓	✓
Flashing Beacon	✓	✓	✓	✓	✓	✓	✓	✓
Emergency Siren	✓	✓	✓	✓	✓	✓	✓	✓
Alarm Clock	✓	✓	✓	✓	✓	✓	✓	✓
USB Compatible	✓	✓	✓	✓	✓			

Eton Emergency Radios: FR160 Microlink / FR500/FR600: Self-Powered AM/FM/NOAA Weather Radio with Flashlight, Solar Power, and Cell Phone Charger

- AM (520-1710 KHz) & FM (87-108MHz) - NOAA weatherband - all 7 channels -
- Built-in 3 white LED light source -
- Powered by solar or dynamo both of which charge internal Ni-MH battery
- USB cell phone charger (USB cable not included)
- 3.5 mm headphone output

Humanure

One of the problems that crops up after a few hours to a day is the question of what to do with human excrements. The dangers of transmission of human pathogens, such as cholera, are well known. Less well known is the fact that human wastes can be composted with thermophilic bacteria that create heat that is high enough to kill the pathogens, and turn the wastes into compost usable for growing plants. Here is an excerpt of "The Humanure Handbook" by David Jenkins:

Organic material should be recycled by every person on the planet, and recycling should be as normal and integral to daily life as brushing teeth or bathing. Organic materials can be collected by municipalities and composted at central composting facilities. This is now done in many parts of the world where food scraps are composted for urban communities. Toilet materials are not yet being collected and centrally composted in very many places, although such collection will undoubtedly increase as time passes. However, people can compost their own organic material in their own personal compost bins, in their own backyards. This is already becoming commonplace, and compost bins are now popping up in backyards everywhere like mushrooms after a rain. Composting need not cost money, and it can be practiced by anyone in the world at probably any location where plants can grow. Therefore, it is important that people everywhere learn to understand what compost is and how it can be made. It is also important that we understand how to compost our toilet materials in a safe and simple manner. A low-cost composting toilet system can be very useful as a back-up toilet in an emergency situation when electrical or water services are disrupted, or when the water supply is diminished as during a drought, when flushing drinking water down toilets becomes especially ridiculous. It can also be very useful in any area where water or electricity is scarce or non-existent, as well as in developing countries where there may be many people with little or no money to buy commercial composting toilets. Finally, a simple, low-cost composting toilet system is attractive to anyone seeking a low-impact lifestyle, and who is willing to make the minimal effort to compost their organic materials. This chapter details how to compost toilet materials by using a simple, easy, low or no-cost method (a sawdust toilet) which my family and I have used for twenty years at the time of this writing.

THE SAWDUST TOILET ON CAMPING TRIPS

Humanure composters have tricks up their sleeves. Ever go on a week-long camping trip or to a camping music festival and hate using those awful portable chemical toilets that stink? If you have a humanure compost bin at home, simply take **two five gallon buckets** with you on the trip. Fill one with a **cover material**, such as rotted sawdust, and put a lid on it. Set it inside the empty bucket and pack it along with your other camping gear. Voila! One portable composting toilet! When you set up your camp, string up a tarp for privacy and set the two containers in the private space. Use the empty container as a toilet, and use the cover material to keep it covered. Place a lid on it when not in use. No standing in line, no odors, no chemicals, no pollution. This toilet will last several days for two people. When you leave the camp, take the "soil nutrients" home with you and add them to your compost pile. You will probably be the only campers there who didn't leave anything behind, a little detail that you can be proud of. And the organic material you collected will add another tomato plant or blueberry bush to your garden. You can improve on this system by taking a toilet seat that clamps on a five gallon bucket, or even taking along a home-made toilet box with seat (as shown in Figures 8.3 and 8.4).

From:

David Jenkins: "The Humanure Handbook: How to compost human wastes", Second Edition
Downloadable for free at <http://www.jenkinspublishing.com/humanure.html>