

Are You Ready for the Big One?

A Disaster Survival Guide for Smart People

Remember when the government told us to run out and buy duct tape and plastic tarps in the months before the Iraq war? How did that make you feel? Many people were rather disturbed and angry about it. They thought the "advice" to stock up on tape and plastic was misguided, incomplete, and potentially dangerous. It put us on edge... but did little else. However, something positive did come from that warning. I started to fill in the knowledge gaps... and created a plan to protect my family. It's a plan I'm going to share with you now. But first, please understand my position. I'm not a worst-worst case scenario kind of guy. I believe you shouldn't live your life in constant fear that something incredibly horrible is about to happen. Nonetheless, the world *is* a dangerous place...



"Be realistic! How can lumps of rock zooming around in space affect our lives down here?"

September 11th 2001 Was Our Wake Up Call. The postal anthrax scare that soon followed had us questioning the safety of things we'd always assumed were safe... like opening our mail. And the threat of a rogue nation or terrorist organization unleashing a chemical, biological, or nuclear attack is still present (although, in my opinion, unlikely). There are extreme people called *survivalists* whose entire lives revolve around planning how to eke out an existence in a post-Armageddon world. They are definitely worst-worst case scenario kind of guys. One hundred and eighty degrees in the other direction are the people who totally deny the possibility that tomorrow could be any different than today – or think if a major disaster does occur it's "game over" anyway, so why bother with any kind of preparation? Well, I'm not ready to pack up and move to a mountain cabin in Idaho, nor am I ready to give up without a fight. So, what does the reasonable person think and do? I believe, as with so many things in life, the middle path is best. We look to those on the *lunatic fringe* to establish the extremes, and then define our position somewhere in between. I don't want to live a life engaged in constant survivalist fantasies, nor am I comfortable with the *do nothing* option. Therefore, I've prepared this guide: a disaster survival kit for smart people. It includes an action checklist you can print out and use to develop your own customized plan. Feel free to modify it to suit your personal situation and needs. However, I do ask that you recognize the futility of assembling just a few convenient parts (like duct tape and plastic tarps), as a feel-good measure. And please remember: the most valuable possession you'll have in any disaster situation can't be found in any hardware store or supermarket. It lies between your ears. Keeping a cool head and knowing what to do is *the* key survival asset.

Terrorism Versus Mother Nature. Many folks are very afraid of a terrorist attack. However, it's important to know that the chance of a terrorist attack directly threatening your life is very slim compared to a natural disaster. Where I live (Long Island), we're overdue for a devastating hurricane. The last category three hurricane to strike our area was in 1938. When it hit us, seven hundred people died. Nearly ten thousand buildings were destroyed and sixty-three thousand were left homeless. Experts predict that another hurricane of similar force would cause even greater devastation today, due to the much greater population and development in the area. They believe the next time a cat three storm like the "Long Island Express" roars through, it might be [The Greatest Disaster in U.S. History](#) (Don't click this link if you scare easily).

No matter where you live, your local area has its own potential for a similar doomsday event: a tornado, forest fire, earthquake, flood, etc. Human error and carelessness can also cause massive disruption: a large hazmat spill, extended blackout, nuclear event, etc. Because of all these variables, I can't give you a "one size fits all" solution. I'm biasing my recommendations towards urban terrorism and hurricane preparedness. You'll need to regionalize the lists and customize them to fit your family size and situation. You also have to decide if you're going to plan for a short-term, mid-term, or long-term disruption. Experts recommend that everyone be able to live independently (totally "off the grid") for at least seventy-two hours... three days. In most areas of the country, that's how long it may take for help to reach you in a major disaster. That's Level I survival. Level II is a survival plan to live without normal amenities or assistance for 20 days. Level III is the plan and supplies to survive for at least 60 days. In this short article, I'll concentrate on Level I. This goes with my "reasonable worst-case" mentality (as opposed to worst-worst case). Nonetheless, we've all seen first-hand how fragile our infrastructure is. When the forecast of a moderate snowstorm causes people to rush the supermarkets, clearing shelves of bread and milk, it doesn't take too much imagination to visualize civilization breaking down quickly after a truly disruptive event.

Imagine you suddenly have no electricity, no running water, no natural gas, no heat, no telephone service, etc. Assume you are in your home or office, and it's not safe to leave. Emergency services are unavailable. Police and fire departments are overextended; even if you were able to contact them, they couldn't respond. You're on your own... What will you do? We're so used to all the conveniences of modern life: lights, appliances, TV, communications, phones, Internet, climate control, etc. When they're suddenly taken away, few of us know how to cope. In these circumstances, panic can set in quickly. Please remember, this is not worst-worst case. There is a fair chance we may face this scenario one day. It sure makes sense to me to have an action plan to deal with that possibility. It makes sense to collect the items for a survival kit

before they're needed. You will NOT be able to obtain them after the event occurs. In the event of a disaster your best course of action is often to remain near your home (unless you have good reason to evacuate). Here are your priorities: water, food, heat, lighting, physical protection & safety, health, communications, and sanitation.

[Printable Survival Kit Supplies Checklist](#)



Drinking Water. Water is absolutely essential to survival. You can go without food for a month or more, but you'll get sick and die from dehydration within a week if you don't have any water to drink. First priority then is to make sure you have enough drinking water. Enough means at least one full gallon per person per day, plus one half gallon per day for each companion animal you want to keep alive. That's a lot of drinking water. For a typical family of four plus a dog, that's 4-1/2 gallons times 3 days = 13-1/2 gallons (90 gallons for twenty days). For the 3 day supply, which I keep, I store six 2-1/2 gallon "Poland Spring" tap containers. Since we use these for our regular drinking water anyway, I just "rotate the stock" to keep the emergency supply fresh. Untreated tap water has a shelf life of up to one year. You can also make your own supply of emergency drinking water by collecting clean containers (rinsed half liter soda bottles work well) and filling them with tap water. Some people add a few drops of Clorox to each bottle to prevent the growth of bacteria or algae. This works and is reasonably safe but does introduce an off taste to the water, as you can imagine. By the way, if you have a large tank-style water heater, it can be a good source of drinking water from the bottom spigot, particularly if you shut the intake valve to prevent possible contamination from the mains water.

Washing Water. In addition to drinking water, you will need lots of water for washing and sanitation. You can reduce the amount required by stocking up on paper plates, cups, and utensils that don't need to be cleaned. If you're at home after a disaster, and the tap is still running, fill all your bathtubs. However, you may not want to trust the water quality, particularly after an earthquake, flood, or other massive disturbance. There's a good chance that contaminants could be drawn into the water system. Some people plan ahead and fill a clean trash barrel with a tight-fitting lid. The barrel is placed in the backyard, garage, or storage shed. Occasional treatment with a few drops of chlorine bleach is recommended. If the lid locks in place, so much the better. If you have small children around, all water buckets must have tight fitting lids. Toddlers have tragically drowned in just a few inches of bucket water.

Sanitation Water. If you lose running water, sanitation will become a major issue. You must therefore save your "grey water," the soapy water that was used for washing dishes, bathing, etc. Don't let it run down the drain. Collect it in a bucket instead. Even if you don't have a water supply to your toilet, it can still be used. A toilet can be "manually" flushed by rapidly pouring in about a half gallon of any liquid into the bowl, all at once. This is assuming you have safe access to a bathroom. You may not. Therefore, your disaster kit must include a makeshift toilet. A good, inexpensive one can be fashioned from a five gallon plastic "spackle" bucket (they sell clean empty buckets at Home Depot) and a toilet seat. Use 13 gallon kitchen trash can liners.

Food. This guide is for "Level I" survival, meaning independence for three days. Preparing for longer duration events is somewhat outside the scope of this short article. Because we're only talking about three days, food is not essential to sustain life. However, it plays a very important psychological role. Everyone's stress level will be through the roof, and food provides security and comfort. You'll need a supply of food that will keep fresh for long periods without refrigeration. Canned foods will store safely for many years. You'll be very surprised when you shop for your survival kit, by the variety of interesting things you can get in a can these days. (Don't forget to include a manual can opener in your kit.) Another good choice for your kit are "dry goods" such as grains, cereals, and pasta. However, these require precious drinking water for cooking, and airtight storage. Remember, if air can get in, so can bugs, and you don't want that. Other choices are "meals in a pouch." These come in foil packs, which just require a little water for preparation. Camping foods are another option. These are freeze-dried, very lightweight, and long-lasting. However, they are very expensive. Just bear in mind, for the relatively short-term duration survival event we're considering here, the more familiar, comforting, and filling the food is, the better.

Food Storage and Preparation. Don't count on having refrigeration. If possible, eat up your refrigerator food as soon as you lose electricity. Eat from the freezer next, although if you lose power to the fridge, you won't be able to use your microwave, oven, toaster oven, etc. Gnawing on a semi-frozen block isn't too much fun. Be really careful with mayo based foods and others that can quickly "turn." The last thing you want is to get food poisoning at a time like this. Thankfully, mustard and ketchup never require refrigeration, and can make boring foods taste a lot better. Your camping gear can serve double-duty in your survival kit. A good [portable camp stove](#) is essential. A [mantle lantern](#) is very nice to have too. You'll need to decide between propane and white gas as fuel. Propane is cleaner, easier to use, and safer. White gas is

cheap and you can substitute unleaded fuel siphoned from your car's gas tank in a pinch. Propane may not be as easily available. If you can take your gas barbecue grill inside, that might be suitable but... and I hope this goes without saying, NEVER use a charcoal grill inside an enclosed space. The carbon monoxide could kill you.

Lighting. You must have several good flashlights and plenty of alkaline or lithium batteries on hand. The new LED bulb models are particularly suitable in this situation. They give good light yet last much, much longer on a set of batteries than regular flashlights. However, there is no substitute for a good mantle lantern, which can give as much light as a regular light fixture. It's amazing how big a psychological boost good light can give you. I know this firsthand from a multi-day blackout we had during an ice storm a few years ago.

Evaluate the Safety of Your Home. After a natural disaster or massive explosion, you should evaluate the structural integrity of your home. If you're unsure whether it's safe or not, you may need to evacuate. Unfortunately, if the event was severe enough to damage your building, it also probably made the roads impassible (buckled pavement, fallen trees, downed electric wires, flooded, etc.). Regardless, the roads are probably gridlocked with people trying to escape. In this situation, you're probably best "camping out" in your backyard or in an auxiliary structure like a garage. Here's how to tell if a building has sustained major damage: stand back and take a good look at the walls, ceilings, and floors. Thin cracks usually aren't serious, but large cracks, broken beams, significant distortion (buckling, twisting, etc.), new gaps, and open spaces aren't good signs. Listen for creaking or cracking noises, indicating potential collapse. If you're in serious doubt, get out quickly. If you decide to stay indoors, sweep up broken glass and try to make the environment as safe as possible, particularly if you have little kids around.

Money. If you need to evacuate, cash will be an essential element of your survival kit. That's because we have a cashless lifestyle and don't normally keep large amounts of cash money around. Most of our purchases are made with credit cards, debit cards, or checks. However, during and after a major disaster, it's unlikely that merchants will be able to process charge cards or validate checks. If people are selling things, they're probably going to accept cash only. Also, they may not be able to open their electric cash drawers, so don't count on getting change back from your hundred. Better to have smaller denomination bills available. Keep some fifties though. They may come in handy for bribes. Don't laugh. I'm totally serious. In addition to a hefty cash supply, you will also need to assemble a 72-Hour [Emergency Financial Kit](#) (Adobe Acrobat PDF file. Please click only once and wait).

Communications. In a major disaster, wired phone service will almost certainly be disrupted; lines may be cut or the circuits jammed. Your cell phone service will probably remain operational, although it will likely be overloaded. You'll have to keep trying to get an open cell. If landline phones are down, then cable TV is probably off the air, although broadcast stations will most likely still transmit. However, unless you have a pair of "rabbit ears" lying around, and know how to hook them up, you're not going to receive those signals. A totally essential survival item then is a working AM/FM radio. That means a battery-operated one with fresh batteries available. It may be your sole link to the outside world. Even better, get my Cool Thing of the Month: The FreePlay GSW self-powered AM/FM Shortwave radio. In this age of global Internet access, the concept of getting all your information through a transistor radio seems awfully quaint. However, you'll be very happy you have that little device. With it, you'll be able to find out what's happening in your local area and statewide. You'll hear how widespread the destruction is, and whether you can expect help to arrive anytime soon. Most importantly, you'll hear evacuation orders if they're announced. Other important information may concern whether the water supply is safe to drink or not, and whether civil disturbances like rioting or looting are taking place. (Unfortunately, disaster situations bring out the worst as well as the best in human nature.) Bottom line: you'll only be able to protect yourself and your family if you know what's happening. Some people consider a firearm or other weapon an essential part of their survival kit. This goes along with the survivalist fantasy of being threatened by people desperate for food and water. In good conscience, I cannot advise you in this area. You should know the chance of a horrible accidental discharge far outweighs that of needing a gun to fend off marauders. To me, having a cudgel or baseball bat makes more sense. Rent the movie [Casino](#) for detailed usage instructions.

Health. You need a first aid kit and you need to know how to use it. This checklist has the essential items

[Printable First Aid Kit
Supplies Checklist](#)



This little spiral-bound book will give you the basics of first aid: [FastAct Pocket First Aid Guide](#). You can't count on anyone coming to help you. If there are injured people around, you're going to have to help them by yourself. However, if you have the supplies, and a little knowledge of what to do, you'll be able to render good emergency care, even to yourself. The most important thing is to remain calm so you can think clearly. If people in your household take medicines on a

regular basis, you'll need to have access to them. The best is an extra supply in the emergency kit, but you need to make sure they don't go out of date.



Weapons of Mass Destruction



Many people are worried about terrorists using weapons of mass destruction. This could happen, although I believe it is unlikely. These are the facts (from the California Department of Public Health):

*"**Chemical agents** are poisonous gases, liquids or solids that have toxic effects on people, animals or plants. They can be released by bombs, sprayed from aircraft and boats and used to contaminate the air and food and water supplies. However, they are difficult to manufacture and to deliver in quantity. For example, the Pentagon estimates that a ton of Sarin gas would be necessary to produce 10,000 casualties. **Biological agents** are organisms or toxins that have illness-producing effects. Biological agents can be dispersed by aerosols, animal carriers and through food and water contamination. Again, they are difficult to manufacture and to deliver. The Aum Shinrikyo cult, which attempted a major Sarin gas assault on the Tokyo subway system, had millions in funding and a sophisticated staff, yet was unable to produce a biological weapon after five years of trying. **Nuclear agents** are substances that generate harmful radiation. Particularly worrisome are 'dirty bombs,' which use a conventional explosive to disperse nuclear material. However, please bear in mind, nuclear devices and materials are closely monitored and difficult to obtain."*

Having said that, a chemical, biological, or dirty nuclear attack IS possible, and may come without warning. However, you can get some advance notice by watching nature's signals. If you see a dead bird, that's an ominous sign. Birds are very sensitive to toxins and are usually first to die. Small animals like cats succumb next. If you're suspicious, get indoors quickly. Seal off doors and windows with the duct tape and plastic sheeting you bought in January. Don't forget to also seal off vents (cooktop hood, bathroom exhaust, clothes dryer, etc.), through-the-wall air conditioners, fireplace flue, and hearth. You may or may not be able to get up on your roof to seal off the plumbing vent stacks up there. If you don't, then you'll need to cover all your sink, shower, tub, and washer drain holes. This is a lot of work, yet must be done quickly if you suspect the air outside has become contaminated with a biological/chemical agent or nuclear fallout. Some people will create a "safe room" and retreat to it instead. This is usually an interior room that can be sealed tightly. If you have a full basement, this can be the best place. You may be able to seal its perimeters better than in other locations in your house. The important thing is to remain inside until the worst has passed. This may not take long. Most particulates will be blown away and poisons diluted by fresh air in a matter of days. But there are important exceptions. Depending on the nature of the nuclear event, contamination may be virtually permanent. Anthrax spores can remain alive and deadly for years. However, we're approaching worst-worst case thinking now... and I don't want to continue this line of thought. Nonetheless, I should mention gas masks since so many people wonder if they should buy them. I don't own a gas mask and have no plans to acquire one. While it's true that the right kind of mask... with the right kind of filter... worn at the right time... can protect you from some bio or chem agents, that's too many variables for me. In the event of an attack or incident, I doubt I'll have the mask with me, have the correct filter for the agent I'm being exposed to, or be able to keep it on long enough to do any good. Filters are the weak spots of masks. They're highly specific to the exposure, have limited shelf life, and don't last very long in use. Also, many agents that attack by being inhaled are also absorbed through the skin. Unless you also have a protective "bunny suit," why wear the mask?

Public Warnings of Imminent Disaster. Aside from what you personally observe and experience, there four ways you may be alerted to a catastrophic situation:

- Warning sirens or horns. In my area, the same sirens used by volunteer fire departments also serve as disaster warning devices. Instead of intermittent blasts used by the fire department, the sirens would sound continuously in the event of a civil warning. Of course, these outdoor warning systems may not be of much use if you're

indoors and can't hear them.

- Emergency Alert System (EAS). I'm sure you've heard the tests: "If this had been an actual emergency..." on radio and broadcast TV stations. One day it may be for real.
- Announcements over cable television. In some areas, cable TV companies are equipped to relay emergency announcements. However, if you lose power to your home, you're out of luck. Even if you hook up your own emergency generator to power your set, the cable company's pole amplifiers and such will be knocked out of service and no signal will be delivered.
- Residential route alert. Police cars, fire department vehicles, or military vehicles equipped with public address systems may travel through your neighborhood to notify people of an emergency situation, but don't count on it.

Storage. My own disaster plan includes a three-day supply of most items, with both storage and a safe room in the basement. I keep everything in [Rubbermaid Totelockers](#). These have enough storage capacity, yet can be loaded in a vehicle if we need to evacuate. While not waterproof, they seal reasonably well and are water/dust resistant. Some people like to use new 33 gallon plastic garbage cans for storing survival gear. While the cans can do double duty in an emergency, holding water or waste, they're not very transportable. What you don't want are dozens of little boxes holding your stuff. It would take too long to get them into your vehicle if you have to leave quickly. Fuel storage is a problem. White gas for your camp stove or mantle lantern should normally be stored outside of the house. If you do decide to keep some in your emergency storage area, be sure to store it well away from food or other things that could become contaminated by fumes or spills.

Summary. There's a lot more to this survival business, of course. Whole books have been written... However, just having this short article in your possession and taking the nominal effort to assemble your 72-hour survival kit will put you in the top 1% of all people able to cope in a disaster situation. The other 99% will not have the knowledge or resources to make it through safely. Having said that, it is my sincere hope this has been the most USELESS article I've ever written – and that all your study and preparation will be for naught. Nonetheless, please print the checklists, gather what's needed, and assemble your survival kit. Think of it as cheap insurance that will bring you great peace of mind.

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