

***THE TURBO-NUCLEAR***

**DOOMSDAY**

**PREPARATION**

**GUIDE**

- *Jim Turvaville (2012)*



## INTRODUCTION

This has been written as much tongue in cheek as factual; serious as much as silly; but, in the end I hope that it will be entertaining and informative. Harking back to my own father's curiosity of end-times prophecy and fascination with self-sufficiency and innovation, I have always thought on the subject of how to survive on wit and wisdom as much as skill and education. Since I tend to think I have more of the former than the latter, it has been a self-fulfilling prophecy to study and be engrossed in the "2012" predictions and analysis. Between all of the *History Channel* specials on Nostradamus and Mayan and Hoppe Indian Prophecy; and *National Geographic Channel* detailed examination of *Doomsday Preppers*, the world has been replete with documentaries of people fearing everything and doing ridiculous things to be ready for them. I do not endorse those who live in fear of some catastrophe coming upon the earth; nor do I attempt to validate those who have made prophetic statements, either recently or in the annals of history past, which would decry doom and destruction upon the earth from a simple galactic alignment.

My personal opinion, which only history will confirm or deny, is that all of the current rhetoric and uproar over impending doom is much ado about nothing, akin to the uproar over Y2K which I lived through just fine. The only difference now is that we have a new player on the scene in this world – radical terrorism; and that leaves a bit of a wild card in the deal of life. Since history was first written to be preserved for the ages, someone has been proclaiming that the sky was falling and that the end was near. Whether the Early Church who was guilty of selling all of their possessions and sitting down waiting for the Lord's return; or a the questionable sanity of a Televangelist in the 1980's who made a fortune off of being wrong about the eminent return of Christ, and that several times. Secular history is just as replete with those who, for various scientific reasons, have proclaimed man's time was coming to an end on this planet; not unlike the climate change evangelists of today. Still, my personal faith and understanding does not allow me to throw simply away the centuries of Christian heritage and reach the point of believing that the written Word of God and millions of its scholars and believers are all wrong. God has said that the world will end when He says time it up; and that a sequence of events in the Middle East have to play out before that time is near.

While the unrest in that part of the world is no secret; as of this writing in early 2012, I simply do not see where people, powers and nations can align in the manners outlined in the Scriptures to allow a culmination of historic events before the Winter Solstice this calendar year. If it does, then I will be pleased to be wrong; but my spirit and intellect tells me otherwise.

And to be clear: the “Turbo-Nuclear” title is a self-appointed nickname, it has nothing to do with my actual consideration of a nuclear event happening. That is one of the scenarios that is certainly possible, but falls farther down the list of the likely, and hence down the list for which we should be prudently prepared in my own survival guide. I also write this guide with the preconceived notion that I am not a “bug out” kind of person; instead I am a “bug in” person who will choose to stay put for the most part when a catastrophic time comes. While I reside in a relatively major city of nearly 400,000 people, I have a certain sense of security in my little apartment in a gated complex in a reasonably safe part of town. I also am of the opinion that should really serious calamity befall our society – major natural disaster, pandemic plague, widespread terrorist attacks, solar flares or sudden magnetic pole reversal of our planet,

to name a few – I really do not have any desire or motivation to attempt to survive for months or years in a totally collapsed world. My eternal reward is significantly greater than any earthly existence, and I have no fear of making that transition from this life to the next. In fact, I find it both humorous and sad at the same time that those who work so hard at trying to prepare for an existence in this world following such an event are, in my observation, really just afraid to die. I pray for them that they find peace in their heart before it is too late; as the late Keith Green so eloquently said it, “Some people don’t find out ‘till they’re half dead, that they need another life”. I have found that and am fully prepared to meet my maker, be it tomorrow or half a century from then.

Still, wisdom and experience reminds me that to be prepared for the worst, while hoping for the best, is the most logical path. I do not think it out of line to do the same for this particular circumstance in life. Whether a natural disaster, pandemic, an economic event of nation-destroying proportion or a conveniently timed terrorist attack on our native soil happening this year or a decade from now; wisdom says to be prepared. To that end, I am doing that in this manner.

## PROTECTION AND PREPPING

Before specific threats and preparing are discussed, I would start with some thoughts about general protection and prepping for your own personal safety and that of your family. This extends to not only personal protection but getting yourself into a condition to be able to not be subject to as many problems in a future time of crisis. Like all of the thoughts considered in this guide, these are only what I have done in these areas; they are meant to be mental ticklers for you to develop the method of prepping that is most applicable and comfortable to your specific situation.

I own a gun; actually it was my father's and I acquired it after he died many years ago. It is a very small 25-caliber semi-automatic pistol which he bought when I was a child; I went with him when he bought it and he was very proud to own a small hand gun which he could use as a source of personal security. As a Korean Conflict veteran that was formally trained in gun use and safety, he also owned a couple of nice rifles which my older siblings now possess. However, he never made having or using firearms a central part of his life, only to have them as a means of personal safety.

As such, I see them not as a sport or recreation but only as a form of security for myself and my household. If you were raised differently and have another view of firearms, do not in any way think that I have anything but respect for you and your position. Adjust your plans according to your comfort, convictions and skills. I have very few gun skills, and with the visual impediments with which I was born and have lived, I have no interest in having firearms for any purpose but last ditch self defense. I prefer to think myself out of a situation before it escalates to weaponry needs.

To that end, I will not be a part of the prepping fad of stocking up enormous piles of firearms and thousands of rounds of ammunition. I have a few hundred rounds that fit my pistol, which I consider more than adequate for any level of protection that I will need from that firearm. However, I also poses a couple of nice pellet guns which can be loaded with modified ammunition and be able to kill small game should it become some form of necessity. They also can be a very effective, but mostly non-lethal, means of warding off unwanted guests on my property. A nice CO2 powered firearm is under \$100 and the accessories (pellets of various types and styles as well as the CO2 cartridges) are very inexpensive compared

to regular firearms and ammo. Yes, one always gets what they pay for, but this gets me exactly what I want to have as a part of my prepping.

Another area that I consider important for prepping for a future crisis is financial. Not everyone has the luxury of attaining these goals, but as financial planner Dave Ramsey likes to remind everyone, having some plan is better than those who have none at all. There is a variety of doomsday scenarios which alter one's plans for preparation, depending to which of those you tend to subscribe. These range from an internal collapse of our economy making all US currency mostly worthless; to the temporary freeze of financial accessibility making you worth only what you have on hand as liquid assets. Frankly, I am not qualified to analyze either end of that spectrum or anywhere in between. So I have come to a point of planning that makes me feel comfortable, and the rest of that I have to just leave to powers greater and wiser than myself.

A crisis is not needed to remind us that the Scriptures are correct when they say "the borrower is a slave to the lender". But it may become a more harsh reality in a time of crisis, so wisdom also would say to do what you can to minimize that situation. In

short – pay off as much of your debt as practical, and have some form of security for those times which may come. In my case, I have finally reached the point after 26 years that I no longer have a monthly car payment; quite an achievement in modern America. It took paying off what I had and not yielding to the siren song of a new vehicle thereafter. It is amazing what kind of funds one can have at their disposal when those monthly car payments are gone. It has let me pay off most all of my other debts and placed me in a position to begin making the preparations that I describe in this guide. It took me decades to get there; do not let yourself be discouraged as you start the process. Here again, any preparation at all is better than none at all.

Harking again to our old friend Dave Ramsey, getting out of as much debt as possible is one of the steps on his plan to financial freedom. Another of his steps is referred to as an Emergency Fund – cash you have on hand to get you through a crisis. He recommends a goal to strive toward of having cash on hand equal to 3 months of your take-home pay. Ironic that he picks the same 90 day period of crisis to manage that I lean toward in most of the other areas of preparation; yet I have not achieved that level of Emergency Fund myself. I'm working on it, as should

you, with the knowledge that anything that I have in that fund is better than having nothing in it at all.

There is the ongoing argument that US paper money will be of little or no value in a coming crisis. There may be some truth to that theory, but I have chosen to maintain some level of faith and trust in my Country and not go to the other end of that spectrum where people hoard up precious metals instead of paper money. For those who choose to do that, I have nothing but respect; time and history may very well prove them right and me wrong. The point is to consider what you feel comfortable doing and make a start.

I have also studied and have a certain level of belief in those who believe that the time tested barter system will kick in during a time of financial crisis. To that end, some are stocking up on things which will be in demand and of value in an altered society following catastrophe. One man in Texas that I reviewed is hoarding large quantities of various alcoholic products, though he is abstinent in that area himself. I find it a good line of logic, that when times are hard and money is worthless, a few packs of cigarettes or good bottle of Absolute Vodka or Jack Daniels Whiskey may be one of the most valuable things a

person can have in their possession. Since alcohol also has medicinal and first-aid purposes making it quite logical to have some of it on hand even if you are not a social drinker. I have a reasonably comfortable stash of it myself; though I consume them on such a small scale it is hard to measure. The good thing is the extreme shelf life of hard alcoholic products, so this investment should never lose its value.

I toss that out only for amusement and consideration – the point is to sit back and think what commodities may be scarce and valuable in crisis and stock up on a few if possible. It may be that you can stock up other items that may find scarcity and value in a post-monetary society. In times of crisis following a nuclear detonation event, Potassium Iodide tablets will be in huge demand to protect from thyroid damage leading to a painful death. Those are currently commercially available for a very reasonable cost; one who had quite a supply might find them worth their weight in gold pressed Latinum (to cite a Star Trek reference to an imaginary precious metal). Should you stock up on them? That's your choice; my point is that common things become uncommon and rare in times of catastrophe. Think ahead.

Your dwelling may be your castle or your tomb, depending on your preparations for crisis. As noted already, I am not a “bug out” prepper who is getting ready for a flight to some other location of safety in time of catastrophe, but one who intends to ride out any storm in my home. To that end, I have made some observations that may help you make your home safe and prepared. Most people, including myself, do not have storm shelters like I grew up with in Texas, though the small aftermarket items are popular in some areas. These may be above or below ground shelters, usually concrete or steel, sized for 2 adults and possibly a couple of children. They are great for tornadoes or hurricanes (if not below flood levels) but do not offer much long-term protection from other forms of catastrophe. Many areas of the country have homes with basements; offering an abundance of storage and the ability to make extensive preparations. Living in an apartment complex, I have nothing of the sort; so, I must plan the best I can with what I am given. You should examine your home situation and develop a plan with what you have been given as well.

Protection from intruders is something that we already consider in our homes, so I expect that area of concern to be relatively prepared. If you have large

windows, you should have some material planned to be pressed into service should they be broken. This can be plywood or similar material common for hurricane protection, or tarpaulins sized appropriately. I have fewer windows than the average single-family dwelling, and have stocked tarps to cover in case of emergency along with a few required tools for attachment. If you have a home with central heat and air, it may be a design feature that you have little capability to open windows for air circulation to cool yourself in the event of the loss of that system. Think ahead of how you might create some form of natural air movement through your home without any primary electric service, and assuming outside air was free of contaminants or contagions.

I keep my Camping gear in storage at my home because, apart from the tent, it contains a lot of handy survival items already. It is in 2 large duffle bags and can be quickly accessed for use at home, or grabbed on the run if a “bug out” event has to happen. But mostly if I decide to just take off on a whim for a quick weekend outing, nothing needs to be packed but food and water. It took me a couple of years to piece it together in a convenient package, if you decide to design your own do not think you have

to create it all in one weekend project. Think it through with both the casual campout and the crisis survival in mind and you can assemble one of which you can be proud.

## THE POTENTIAL

As noted, there are a variety of possible events that can bring about the need to have prior preparations made for some level of self sufficiency. I do not attempt to prognosticate what event can most likely happen, but instead to focus on some potential ramifications of a variety of events that are all common. Those would lead me to have a relatively common set of preparations made which can be beneficial in a variety of situations. I separate these levels of preparation into the following, in no particular order of importance or likelihood:

- 1, A Loss of Primary Public Utility service for a period of days to weeks, to possibly 2-3 months.
2. The Failure of the national transportation systems for a similar extended period.
3. A Loss of Communications infrastructure for an extended period.
4. Widespread illness, even of a non-pandemic level, that makes going out into public a threat to personal health.

I will comment on each of these and how I am addressing my own prepping for them, then I will try to give a basic outline of lists of items that I consider a part of my plan. This is not meant to be a formula for you to follow, but rather just a way of giving you a detailed look at how I view planning and possibly planting the seed in your mind to create the process that is right for you and your specific situation.

Your personal family situation will demand that you adjust any plan that I have outlined to meet specific challenges. Obviously, we are empty-nesters who only have to consider two adults; you may need to plan for small children's needs or those of an elderly parent who lives with you. Again, this is just meant to be food for thought - take it for that.

## LIVING WITHOUT PUBLIC UTILITIES

On the surface, this probably scares people as much as it mystifies them that it is even possible that it could ever happen to them. This is America, for the love of Pete, is it not? After all, we are all well accustomed to flipping a light switch and turning a faucet and just expecting that electricity and water will be at our fingertips. While those indoor home conveniences are well under a century old in our country, it has been a couple of generations since our families have had to find an existence apart from them. We take our microwave ovens, cable TV, internet and cell phones with an almost equal level of casual entitlement; and they are even newer parts of our lives. I'm only 50 and grew up with none of them and have never felt that I missed a thing; while my children grew up with them all and would probably typify those in our culture who simply have no idea now to exist without them. If for that reason alone, I am pleased to be from an earlier generation, even proud of the "old" term if applied to me.

While there are a myriad of reasons that our Public Utility service could be interrupted, that is not the point. The question is rather how to be prepared to have a reasonably comfortable existence when it

happens - if not comfortable, at least an existence which maintains a reasonable level of health and well being. While there are many catastrophes that might not interrupt our utility service, the fragility of the system may cause a disruption from the most seemingly benign event; so the preparation can only be wise. I consider that it would be prudent to prepare to be without Public Utilities for a period of as long as 3 months if you have the capacity to do so. Obviously, a 3-week or a 3-day capacity is better than none at all, so start with what you can logistically accomplish.

### Water:

This is probably the utility that is the most vital for sustaining our life existence and less for our personal creature comfort. Yes, we bathe in it and wash our clothes in it, but our bodies requires to drink about 1 liter of it a day just to keep us from dying, 2-3 liters of it to keep us healthy. So these two basic uses of water are represented by the two opposite definitions of it: potable and non-potable water. The former being safe for us to drink and the latter not so much, but useful for other things to keep us comfortable. Wisdom says we calculate and maintain a stock or an availability of both. Just how much that

should be of each type is a great place to start in your preparations.

Potable water is safe for drinking and using in food preparation. When calculating the amount of water needed to have in reserve, we must remember the other uses of clean and safe water, lest we grossly underestimate our needs. Begin with the minimum need for sheer existence: 1 liter of clean water to drink per person per day. Coincidentally, bottled water is universally available in half and 1 liter bottles making preparations easy for even the most mathematically challenged among us. A 24-bottle case of 500ml bottles will keep one person from dying from dehydration for 12 days; or reasonably healthy for 6 days. A 90-day supply of the latter calculation would require 15 cases for one person, 30 cases for a couple. Add in about a liter a day for some basic cooking needs, and it starts to really add up fast. Replacing some of those little bottles with 1 liter, 2 liter, 2 gallon or 5 gallon containers makes the math harder but storage and handling possibly easier.

Therein is the tough part of keeping potable water: it takes up a lot of space and is heavy. It's not just Alton Brown who reminds us that "a pint's a pound the world around", so does basic physics. A 5-

gallon jug of water weighs a whopping 40 pounds (plus the weight of the container) meaning this is the one single thing to store up that takes up space and requires a sturdy shelf or floor to do it. It is the one thing that I struggle to find a place to keep in my own small apartment; people with a more normal sized single-family home with a garage or basement can probably work out some way to handle this need. The upside is that it is relatively inexpensive, so it can probably be the one thing that you can stock up on sooner rather than later and not break the bank. It also has a really good shelf life – typically rated to be pure and clean for 24 months or more past the bottling date. After that, some of the impurities that are inherent to the bottling process (not being done with boiling water or in a vacuum) can possibly begin to grow their nastiness inside the sealed container. For that reason, the smaller water containers are probably safer for longer term storage, rather than the larger 2 and 5 gallon sizes.

While most of us do not normally go through the quantity of bottled water that we will want to keep in our doomsday stash, it is wise to at least make a reasonable effort in rotating your stock of this commodity. I have found that we do typically go through a case or two of it a month at my house, so

this would keep a 30-case supply for the two of us rotating about every year and a half, or well within the date period stamped on most bottled water containers. It's not very convenient, but would assure that your stock would be fully usable in time of real need.

Also, it is smart to have some water purification tablets in your arsenal for such a time as you may either question your own water supply's quality, or if you are forced to forage for drinkable water during a time of extended utility outage. These little tables will purify water in 30 minutes to drinkable quality. A bottle of 50 tablets will purify 25 quarts of water and run under \$10 at most Outdoor or Camping supply places or online; I'm not aware they have a shelf life so a good stock of them can serve you in case of an emergency for some time to come. They do have to remain dry, so careful storage is needed.

The amount of non-potable water needed to sustain life is minimal by comparison to that of the fresh kind; most of those uses are for our comfort rather than our mere existence. Hand washing is a health matter and can assist in not spreading disease among those with whom we come in contact during a time of crisis, and can be done with clean but not quite drinkable water, especially when using plenty of

soap. Since all soap has great antibacterial qualities, one can stock up on the real inexpensive liquid and bar soap for this kind of preparation without concern that it might not meet some doctor's recommendation.

Washing your dishes in a pan or sink by hand can serve double duty of getting your dishes clean and hands clean at the same time. Since you will be without water from your Public Utility, there is also a high probability that you will be without natural gas or electrical service; meaning you will not have hot water at your disposal. An abundance of soap will be needed to accommodate for a lack of hot water for effective cleaning, so be prepared to use more of it than you are accustomed. Clothes can be hand washed in a pan or bucket of soap and rinsed in another and hung to dry indoors even in the most humid or cold weather; only the time for thorough drying is affected by those factors. It is a relatively recent activity in our culture to not recycle laundry water and bath water for more than one use; multiple rounds of clothes washing and even multiple people's use of bath water. Our ancestors did not die early from it (they may have died early from other things, however) and it is doubtful that we will for a relatively short period of time. It is not pretty at times, but we

are talking survival and keeping healthy, not a fashion show. Clothes can be worn for many days without the need of washing, particularly in a climate or season where excessive perspiration is not an issue. Consequently, the need to wash them is not as critical in those situations. That means your quantity of non-potable water for cleaning or for cleanup is probably on the order of 5-10 gallons per week. However, the biggest use of non-potable water in most people's homes is for sanitation purposes.

During a loss of public utility service of water, going bathing or showering will be a major physical discomfort. A stock of pre-moistened sanitary wipe – of the kind used in the kitchen or for household cleaning or even baby wipes – can go a long way towards maintaining a level of personal hygiene in the absence of the availability of a shower or bath. These can be purchased in quantity and have a good shelf life if stored in a cool place. I've even taken to vacuum sealing the containers in a plastic bag to keep their moisture intact for a longer period. In situations where perspiration is kept to a minimum, not only do our clothes need less washing, so do our bodies. Of course, in the heat of summer or in naturally warm or humid climates, this can be complicated. Therein is the convenience of a natural source of water –

stream, river, lake or ocean – to aid in that cleaning and cooling process in a more natural manner; unless the circumstances of the catastrophe do not lend to being in public or there is the concern that such public sources of water might be contaminated.

Managing a bath or a shower in the absence of public water supply can be an interesting, and possibly fun, challenge. The outdoor shower kits designed for camping are going to be the best option in a climate or season where doing so is practical. They often have a dark colored vinyl bag which is meant to hold water and be left in the sun for warming before use, giving at least a resemblance of a normal shower. A wise rationing of the water is warranted, but utilizing it will allow a typical adult to have a reasonable shower with the around 2 gallons of water they hold.

In climates or seasons where an outdoor shower is not permitted, in crisis situations where being outside is unhealthy or unsafe or if your living situation restricts it (the balcony of my apartment may not be advised) then an indoor use of the same type shower can probably be arranged. The water may not be as easily warmed, unless you have the ability to warm it over a safely managed fire indoors,

but the bag and showerhead can usually be manipulated in your existing shower stall. Apart from the availability of a camping shower, a partner can be utilized to simply pour water on each other at turn in your existing indoor shower stall or tub. I, personally, find this possibly the most fun aspect of surviving in the face of a disaster, but that is because I have a partner who shares this same feeling. If you do not, then remember that the old-fashioned sponge bath is effective for hygienic purposes and consumes a reasonably small quantity of water for both soaping and rinsing. The initial soap water can be recycled from other washing use, especially from clothes washing, and then the use of clean water for the rinsing process can leave one feeling fresh. Do not forget to have a supply of anti-perspirant and/or deodorant on hand. This is another easy-to-stock item if we must put it on our list. Like my toothpaste, this happens to be an every 2-week item, so I just add an extra every few weeks and build up my stock of 6 instead of 1 on hand.

After use for a shower, that largest use of non-potable water would probably be for flushing a commode to remove waste products. Herein is also a difficult situation for which to adequately prepare, as there are so many variables to be considered.

Depending on your geographic location, and rural or urban environment, you may have your own septic system on your property or enjoy a totally gravity fed system of waste removal from your home, even in an urban setting. This means that it would still function practically well for a reasonably long period of time in the absence of water and electric service. While it might not last for months, the ability to flush wastes away for at least a week or even a few in an urban setting will go a long ways toward not creating the spread of disease from being unclean. After that, it may be necessary for one to get creative in finding ways to safely dispose of waste products from your home. If you have a great deal of property at your disposal, then human waste products can be composted along with leaves and other natural products effectively. It will lose its odor rather quickly unless you live in a very humid climate and begin the process of decomposition along with the other items in the compost heap. In a more urban setting, this can be more problematic and may lead to needing to have a stock of plastic bags which can be effectively sealed to keep the odor and subsequent disease causing agents from propagating the house or neighborhood. Depending on the nature of the crisis at hand, some level of sanitation pickup by your municipality may be functioning thereby aiding in this situation. If not, and

you have transportation available, community sanitation collection points may be operating to keep disease a bay during these times of which you may avail yourself.

If you live in a municipality, most of your water and sewer departments have diesel generators to make power to keep water and sanitation pumping systems functioning for several days without primary power. This would be your last opportunity to draw water reserves before those systems cease functioning for a lack of fuel. Unless the water distribution network has somehow been compromised from an event like an earthquake, it is highly likely that even after the catastrophe you will have the opportunity to draw water at the last minute and store it in your home. However, this supply is more likely to be of a questionable nature, so the reliance on it for safe clean drinking purposes might be unwise.

Instead, having a supply of safe drinking water for personal consumption and cooking should still be a top priority and the last-minute draw of water from a soon to cease operating public utility is best reserved as non-potable water for sanitation and cleaning purposes. This also reminds us to have

plenty of containers accessible for storage of said water, or it being available is of little benefit. That can take the form of large plastic storage tubs or 5-gallon buckets which will stack quite efficiently before needed for use in this manner. Remember that a lid on them will keep added contaminants from entering; even if they are not unhealthy they might make the water unsightly.

### Heating:

Natural Gas is a public utility quite common in homes in many geographic areas of our country, mainly from the enormous abundance of this natural resource in those regions. Homes that use heating oil or coal for their cold weather resource will have more options available as they already have systems in place which can function more easily in a time of crisis. In all of those instances, however, at least some electricity is typically required to operate heating systems, if only to power a thermostat or power a blower to move air. If you happen to have an all-electric home, then your life will be the more complicated by the dependence on that utility in the time of a crisis.

The obviously easy answer for emergency heating is the presence of a wood-burning fireplace. This commodity is not as prevalent as in years past with the advent of gas fireplace inserts which are so much more energy efficient. As such, only a small portion of people will be able to actually light a fire in their home and have it contained in a safe manner. This is one area where I feel fortunate to live in the urban environment that I do - I live in an apartment complex which was constructed in the 1980's when real wood burning fireplaces were the style, and long before the efficient fireplace inserts were around. This permits me to not only stay warm, but to cook, heat water and dispose of household waste at the same time and remain safe. It also requires the ability to stock up on a certain amount of wood, and that can be a challenge if space considerations are an issue. In my case, my complex has limitations on the storage of firewood on our outdoor patio space because of insect control. I have a small supply inside a storage closet that will be a minimal start for my needs. Remember as well that you will need kindling and fire starting materials. All of the firewood in the world will do you little good without some kindling to get it burning and a match to light the kindling. This is probably the single thing that I know of for a practical use for a newspaper. The days of having one around

for “news” passed us 20 years ago and apart for needing packing materials or having a birdcage, I cannot imagine why they exist. Keeping a supply of newspaper stored in trash bags will help keep them in an easily burnable condition to use for kindling. Matches have the requirement of being dry, so keep them stored so they stay that way or procure the waterproof ones at your camping supply place. I am finding it harder every day to find the “kitchen matches” we had as a child that will strike on any rough surface; instead only the “safety” version of them are in most store shelves, which require the box containing a mating chemical striking surface on which to strike them. This will most likely prove a challenge in a time of crisis, especially one involving wet conditions. I have found the fire-starter devices which rely on metal shavings and flint to be valuable as a fallback plan to create fire, as well as the tried and true Zippo lighter with spare flints and liquid refills.

One of the primary causes of house fires each winter in the cold climate where I live is the improper use of space heaters. During the coldest weather, the local news is replete with stories of the displacement of families who attempt to use a space heater in a manner in which it was not designed or which is

unsafe; not to mention the occasional sad story of a child or adult who dies from the incidents. The act of survival during a crisis in does not negate the necessity of common sense and safety in the home, nor does it stop the laws of physics from being applied. Heat sources not properly separated from flammable material will cause a fire which will get out of control and cause property damage and bodily injury. The use of outdoor heating appliances in an indoor environment without proper ventilation will lead to carbon monoxide poisoning, sickness and death. Do not put your survival instinct ahead of good sense in these matters placing yourself, your family and neighbors at risk. Do not use a camping heater to warm your house without some serious precautions about where it is placed, the materials around it, and that you are certain to have proper ventilation for the gasses being dispelled. Read the directions on the devices carefully now, while you are not cold, wet and possibly in a less-than sound mind, and develop a safe plan to use them in the time of crisis if they are to be one of your backup heating options.

Homes which already are designed to use heating oil or coal will be able to utilize those resources with the availability of minimal electricity in

most instances. This is where a small portable generator can make for its best use in a home heating situation. While these homes can bring a nearly normal level of heat with only a small amount of electricity from a generator, the all-electric home will be forced to resort to some alternative methods of providing heat. A similar caution is hereby extended when using a portable generator for this purpose – its small size may make it tempting to operate it indoors; which can only be done with adequate ventilation to the outside of the exhaust fumes. Even operating it in a garage or basement, if closed, will quickly cause the possibly odorless fumes to infiltrate the home and bring sickness and even death. If you have a portable generator on hand for this purpose, plan now on where it can be safely operated to provide the power needed to use your heating system, not forgetting to plan for a safe supply of the needed fuel (usually gasoline or diesel) and the power cords needed to connect to your system. If needed, consult an electrician now to find out what needs to be powered and at what voltage and current demands so you will have the correctly sized portable generator.

## Electricity:

The all-home generator is becoming more available for consumer use, with the big-box home do-it-yourself stores either stocking them or making them available for order and quick delivery. They come equipped to be powered from Natural Gas, with an optional Propane kit for homes without gas service. Unless you live in a rural area, the mass storage of Propane fuel may be prohibited by local zoning regulations. Depending on the type of catastrophe that befalls us, the natural gas service may be available for a short period of time after primary electric power has been lost. It would not be prudent to consider that this will be the case long term, so some alternate fuel source for your generator or a smaller unit for temporary use is wise. As already noted a small generator can be an asset for the homeowner to have for powering small items and using alternative fuels for primary purposes. This all-home generator scenario is also most unlikely for the great majority of us, no matter how dedicated we are in our prepping.

So, in this instance, I refer to electricity that is used for purposes other than heating or cooking; much of that use is optional in our lives. While it is

convenient to have lights and appliances, they do not rise to the level of life-sustaining. Oil lamps, flashlights and candles (when used safely) are all perfectly viable options to electric lighting in our homes. Apart from a natural disaster which might prevent it for long periods of time, the sun does tend to shine at times, even in the deepest of winter months. Stocking a couple of good quality oil lamps and a supply of the oil is reasonably inexpensive and has a shelf life of decades unused. Candles can be safely stored for an equally long time in a cool and dry place, remembering to have the needed method of lighting them; that is the most popular use of my Zippo lighters in my own prepping. Modern LED flashlights will run for days on one battery, and are even available in the hand-crank styles which require none at all from camping supply stores.

Those who depend on electricity for cooking will need to have a totally alternative method prepared to replace it in time of crisis. Even a modest size all-home generator is an extremely inefficient method of cooking food and the power is best used for other needs in the home. This is also where camping gear can be of benefit, as long as safety is observed and the danger of fumes is considered when in use. The small propane camp stoves will run for

several hours on the compact canister of fuel, and those can be safely stored in a cool dry place away from a heat source for many years before use. They are inexpensive enough to stock up for crisis use, if bought a few at a time will not even draw undue attention to your buying habits if that is your concern.

Our appliances have mostly evolved from earlier versions which did not require the complexity we seem to have in our lives today. The can opener – a quite vital item to have by the way – really does come in manually operated models, some with comfort handles to make the job of squeezing them more pleasant. The mixer was originally a hand-operated device, or simply a bowl and a whisk. Coffee was first steeped or percolated in a pot over a fire; it may not be bistro quality but if you think you've just got to have it, the old-fashioned version will probably do. Toast was even first done over a fire and the utensils to produce it in that manner are available at your sporting goods store for under \$8. Preparing food was done in these manners for millennia before our modern age, and those generations apparently survived to bring us to where we are today; we can prepare to do so for at least a period of time if called upon by crisis situations.

A crisis does not mean we should be without any form of entertainment at our disposal. The availability of battery powered AM/FM radio sets, as well as the hand-crank styles which require no batteries at all, makes this a necessity in your preparations. If domestic communications are suspected to be unavailable then an inexpensive Short-wave radio set will permit the reception of radio signals from outside our country. These are not as hard to find as one might expect, and work best at night time when the sky wave propagation characteristics for radio are at their maximum. I have found several models for under \$75 that has excellent reception indoors using the long-wire antenna supplied. The one I have is multi-band, capable of receiving standard AM broadcasts, Short-wave, NOAA Weather Radio, several Civil Agency communications bands and standard FM band in one compact radio. Acquiring one of these radios and doing some research ahead of time of common frequencies is a wise preparation. Print out station charts and keep them with the radio so you will have an idea of how to find the BBC or other international broadcasts when you need to have a perspective of a crisis from outside the US.

Our MP3 players would still be a source of private enjoyment, as they will play for many hours on a single charge. The non-Apple branded devices can be purchased for under \$20 and can be stocked with a large variety of musical selections; perhaps several devices crammed full would give one tens of thousands of songs for an extremely long time of being entertained. The advent of the electronic tablet has been a great source of entertainment for me personally, and I fully intend to not let a crisis bring that to a stop. While the internet will invariably be out of service, the games and books that I have on my tablet work great without that connection. I have archived many months of my favorite magazines to the device, as well as several books – all of which will aid in the passing of hours while mostly confined to my home. I have a selection of games that I enjoy on the tablet which can bring hours of entertainment at a small power usage.

But those devices will eventually run out of power. What to do? The nearly-universal USB plug that these devices all now employ make charging them easy with a small solar charger now widely available on the internet and at camping supply stores. I even possess a hand-crank device with the USB charging outlet; that might require more effort

that I would normally care to expend just to hear a little *Journey* or play *Solitaire* on my tablet, but if I had nothing better to do with my time it might well be worthwhile.

## NO TRAFFIC JAMS

The very idea that traffic can stop flowing on some of our urban streets and highways is so foreign to us that *The History Channel* produced an entire series called *Life After People* which depicted how our world might look and age following the disappearance of humanity. It showed the city streets empty of traffic because the people were gone – the cause was not the point, only the manner that the world left behind would decay. I am not aware of the popularity of the series upon the masses, but I watched it all with a high level of interest.

In this text, I refer to the halt of the transportation system in this country, for whatever reason, and the ramifications that it will bring to our daily lives. Whether a natural disaster of some kind causes the production and importation of oil to cease making fuel a commodity that reaches scarcity, or an electromagnetic pulse or solar flare scrambles the electronic ignition systems in our vehicles (sounds crazy, but is a reasonably popular theory), I will simply assume that something has happened and discuss how to be prepared to survive the aftermath. This is also the one potential that can happen and not bring about other situations that we have already discussed

– principally the loss of public utility service. It is just as likely that if the transportation infrastructure grinds to a halt that the nation’s electrical grid may remain intact. Just in case, however, I will discuss some of this from the assumption that utilities may be compromised.

The transportation system brings the world to a smaller realm of existence for us all. We take for granted that the produce section of the local supermarket will have fruits and vegetables in stock year round, since they are transported from the other side of the globe where they are in season. I sit in my recliner and click on my tablet and order vitamins that magically arrive at my office a few days later. The milk I have in my refrigerator comes from a dairy 200 miles away, and I think that is normal. However, all of these conveniences are a relatively new phenomenon brought about by the transportation infrastructure in our country. What began with intercontinental railways expanded to long-haul cross-country trucking and even to airlines delivering commodities to us on a daily basis. I dare say that most people do not realize that FedEx and UPS both operate with the same business model: all packages to go one single national sorting hub where they are sent back out to be distributed to the destination; a process that relies

totally upon cargo planes to accomplish. The only real difference is that all FedEx packages go to Memphis Tennessee and all UPS packages go to Louisville, Kentucky. It is almost impossible to fathom what would happen if that single part of our lives were halted because of a fuel crisis. Even I have no idea how much food, medicine or other vital things are transported by those 2 carriers alone. Add in all of the other air cargo and regular trucking services and the rail delivery of freight, and the brain can start swimming with the lists of things that might suddenly stop being available to the public in that kind of a situation.

So the point of discussion is not how it happens, but what would be affected and how to prepare. Obviously the first and most crucial area is the distribution of food. From a corner convenience store to a mega-market, all of them depend upon over-the-road trucks for the final delivery of goods. A good portion of the delivery system is usually fed by railroad freight, depending on what order the transportation industry is affected by a crisis, rail lines may still be able to run and deliver goods for truck transportation, but trucks not be able to deliver them from the warehouses to the consumers. Or, it may be the other way around that trucks can deliver goods

but their warehouses are empty from a lack of rail delivery. No matter the order, if any link in that delivery chain is broken, the consumer will be without the goods at the other end.

Most industry analysts toss the term of “3-days supply” around when referring to most supermarket shelf stock. In the area where I live, in the dead of winter we have occasionally had sufficiently severe weather that delivery trucks were stranded for 24-48 hours; and that was enough to convince me that the analyst’s assertion is not far off from accurate. Of course the more fresh items are the shortest shelf-life items and disappear first; but canned and dry goods may have a limited stock in most stores. One just has to look at the flurry that people go through to buy bread and milk when the snow starts falling (a practice that I still marvel at and fail to comprehend) and multiply that by nearly every aisle in the store to get an idea of how people may react in a time of crisis.

So the wise prepper will examine their use of food and household goods and begin to methodically increase a stock of items that are needed for sustenance and convenience. I do not subscribe to the notion that we should stock up many months or

even years of food and supplies; while that may be your choice and I will respect it, I think that person, and their view of a crisis, is the exception rather than the rule. My aim in preparing is to survive an interim crisis with the full faith in humanity and the citizenry of this country to restore order and function in a reasonable time, no matter the severity of the catastrophe. I noted earlier that a 90 day supply of drinking water was what I considered as being prepared, I intend to mirror that time frame when prepping for a loss of transportation of goods to the consumer.

When I began considering the loss of delivery of goods to market, I posted a sticky-note on my cabinet with a pencil beside it. Then for a period of several weeks, going about my routine actions at home, when I used any item in my home I stopped to consider how much of that specific product that I typically consumed. I then did a mental calculation of how to have enough on hand so I could go for 90 days without replenishing my supply and wrote that on my sticky-note for compilation of a list of supplies and quantities. While you may have the financial luxury of just going and getting an extra 90-day supply of all of your goods at home, I did not; so I began buying only a few items a week in the quantities needed in certain

categories. One week was health and beauty items (shampoo, soap, toothpaste, etc.) another week it was first aid supplies (bandages, ointment, alcohol, splints, etc.) and yet another week household items (cleaner, laundry needs, paper goods, etc.) until the list began to be satisfied. I still do my regular weekly shopping of items which I deplete, as I always have, rotating my 90-day stock into use as I consume items in a typical fashion. The difference is that now instead of having 1 tube of toothpaste on my shelf, I have 6; yet I still buy a tube every 2 weeks as before and cycle my stock to keep the 6 additional ones as fresh as practical. I know that toothpaste has a very long shelf life, but I have created a habit of rotating stock on everything I have, just so I do not forget it on things that do not have extremely high shelf stability. When compiling the list of supplies to have on hand in case of the loss of transportation of goods to market, also consider the side effects that may happen during this time that will impact other areas of your life.

One area that I have considered is the decreased availability of routine medical care; who knows what effect a transportation crisis will have on the delivery of drugs and medicines. Not to mention that going out in public may be unhealthy or unsafe during these times, so an increased knowledge of and

preparation for basic and advance first-aid is in order. A few dollars spent on a good first-aid book and some careful review now can go along ways toward helping you prepare for handling minor emergencies and a great deal of illnesses on your own. Bandages and medications for burns, abrasions or even broken bones may become a necessity in time of crisis. Much of these items also have a long shelf life, so I have a plastic waterproof container with this all in one place along with my first-aid book. I have also stocked up on Aspirin and a myriad of other OTC pain relievers, cold and flu medication of the types we are accustomed to using and a variety of antibacterial creams and other ointments. These items do not have as long a shelf life, typically under 24 months, so what cannot be rotated into normal use will have to be checked periodically and thrown away and replaced. My bride and I are both on a couple of prescription maintenance medications – cholesterol or blood pressure regulators, for example – which are very difficult to keep a 90-day stock. We have managed to get about 30-days ahead by routinely skipping a day every week or two and keeping the regular refill schedule intact. If you can skip one day every 2 weeks of your daily medication, in a year you will have a 26-days stock. Since my insurance plan does not permit a 90-day refill, I have to resort to this

method to have any long-term supply of prescriptions available. If you have the ability to purchase 90-day supplies, then this area may be something you find easier to manage. You do not want to put your health at risk right now doing preparations, so never stop taking medications for any period of time where an adverse reaction can occur. Since our medications are all maintenance related, skipping a day here or there of a blood pressure or cholesterol pill will have no short or long-term effects on our health.

It is not a certainty that a loss of Public Utility service in one area will necessarily cause one in the other. For example, we may have events that cause an interruption in the Electric Power grid, but your local water supply may remain uninterrupted. While we may not have hot water, we might still be able to shower – howbeit in the dark. In the same way, the transportation system may grind to a halt while public utilities remain active, or mostly so. That would mean we would have to survive in our homes in a semblance of normalcy without the ability to replenish any of our supplies from a store. That might mean some consideration to stocking a bit of the items used on a regular basis which might not be used in a more crisis area.

Consider your Health and Beauty aids, as well as personal hygiene items in this manner. If utility services are reasonably normal, then I expect to take a shower every day; that dramatically increases the volume of body wash, shampoo and conditioner that I would stock compared to trying to manage that activity in a crisis using an enema bag attached to my shower nozzle. The ladies have their own set of products which fall into this category; those should be on that sticky-note for list compilation. In times of crisis, I'd not think twice about the vitamins that I take daily, but if all else were close to normal I would probably want to remain on that regimen in an effort to stay as healthy as possible.

Goods to be stocked can also extend beyond the typical food, household or medical areas. One area I have considered is related to the sanitation as well as cleanliness area – specifically my socks and underwear. That may sound silly, but consider: the more underclothes you have on hand, the less demand to wash them you will have to maintain hygiene and comfort. Consider your actual sanitary needs and also evaluate some options that might reduce your requirements in these areas, including alternatives that may be viable depending on weather

or climate. I'll not detail or speculate, but encourage you to think out of the box in this as in other areas.

For me, this is not as hard as some guys or most girls: I wear black socks - ONLY black socks; and they all are exactly alike, all 20 pair. I picked that up from my years of living alone and doing my own laundry; I never have to sort socks to pairs, since they all will automatically match. Every 6-9 months, I just throw them all away and start over with 20 more pair just exactly alike. I also wear blue underwear – ONLY blue underwear, and they are all exactly alike, all 20 pair. Every 6-9 months, I just throw them all away and start over with 20 more pair just exactly alike. This also let me put my socks and underwear in with my jeans for a more consolidated wash cycle at the Laundromat – had to conserve those quarters, you know. My shoes are a similar scenario – I wear the same kind and keep 2-3 pair extra on the shelf, along with several spare sets of laces. Fashion aside, in hard times function wins out. This applies to many clothing needs and having a few extra pair of jeans and comfortable shirts is not a difficult as it might seem. Also, a shopping trip to your neighborhood thrift store can yield some very functional apparel at bargain prices. This would let you stock a good bit of extra clothing ahead of time in plastic waterproof storage containers to

greatly minimize the need for laundry during a time of crisis.

The socks and underwear are only my example meant to remind you that some goods that you would need to purchase only every 4-6 weeks need to be considered for adding to stock for proper preparation. That sticky-note hung on my cabinet for a long time before I felt like I had included the bulk of things that I needed to have on hand to be without going to a store for 90 days. Much of the things I have stocked do not take much room, they just needed to be purchased and put back. Some things, however, are like the drinking water that takes volume to store in quantity, so you have to adjust your prepping based on the space you have available. For example, I have had to limit my storage of paper towels and toilet tissue; I just do not have room for things like that in huge quantity in our small apartment. I have made some plans for alternate items to be used for both of those particular things, and in time of crisis, they will fall into a “use very sparingly” category with some creative workarounds implemented on the fly.

As noted, the largest need we have which will be interrupted by a transportation crisis is food. I typically keep 2-3 weeks supply of food on hand

anyway, except for fresh bread, milk and some produce. In a crisis, those items will not be available anyway, so with the exception of powdered milk I exclude them from my prepping; I consider them a luxury item to have now that I will just give up in the future. My storage of food is based on a minimal diet of 1,200 calories per day per person from a mixture of meats, vegetables, pasta, grains and fruits. Most of what I have stocked is canned, as these have a long shelf life and are most readily available in an affordable manner. I have calculated 3 cases, or about 72 cans (which will be 2 servings in a can), each of a variety of fruits, vegetables and meats and some prepared pasta products and fruit products. Amazing how little space that stock can take up in comparison to the drinking water needed for survival. Lest I forget to mention yet again – have several good quality can openers on hand or the largest supply of canned food will be of little use.

I see preppers who stock huge supplies of rice, beans and pasta – which may be perfectly fine for their specific situation. I, however, am anticipating that the water supplies needed for cooking those items (gallons of water to cook some pasta) will be better suited for drinking; and the heat sources needed to cook those items for the extended time

required (several hours for some beans) are best utilized in reheating prepared foods. My particular living situation does not allow mass storage of cooking fuels, so the use of my cooking apparatus will be carefully regulated for maximum efficiency. If perhaps this specific situation of a breakdown in transportation leading to scarcity of supply is not accompanied by any loss of Public Utility service, then a reasonable supply of these products should be on hand, as they are excellent sources of protein and carbohydrates in our diet. I would only caution about placing a large emphasis on utilizing them for your survival food supply. I typically keep 5 pounds of beans in stock and use them up in a couple months time; having much more is not a high priority in my prepping process.

Preparing even canned foods requires cooking utensils that can be cleaned with minimal water usage in times of shortage, so prepare according to your chosen method of heating. Utilizing disposable paper serving ware is not a luxury if you have plenty of it stocked away in a dry place and intend to use the product as fuel in a fireplace after use. I would say that plastic cutlery is a waste, but that may be a personal preference. Washing silverware can be done with a few cups of soap water. I would also be

uncertain of the health risks of incinerating plastic cutlery or Styrofoam serving ware in my fireplace. Remember that most canned foods are not seasoned as a part of their preparation, so have a good supply of salt, pepper and your favorite spices on hand to make the food as palatable as possible.

Many dried foods offer an excellent option for nutrition in a time of crisis. These include dried fruits and various forms of dehydrated meats. These should be vacuum sealed for extended shelf life, and can be eaten as snacks in their native condition, or rehydrated with small amounts of water and added to other foods for a more complete meal package. I happen to really like some of the dehydrated beef and sausage products and have them vacuum sealed for snacking purposes already. An added back supply can assure a good deal of protein in one's diet while surviving in a crisis situation.

There are several good commercial sources of vacuum sealed meals which are affordable and suitable for long-term storage and use in a crisis and take up little space. A supply of a couple of hundred 4-ounce meal packets conveniently come packaged in a 5-gallon plastic bucket which is waterproof, shelf stable for years, stacks neatly and is around \$120. I

have some of this type food, but it is meant to be a supplement to my mostly canned food supply and as a break in the monotony of food choices. We have also home canned some of our favorite foods in glass jars – a skill my bride has had for years – to add more variety and provide a reminder of homemade meals to our preparation process. These are almost all pint size jars, chosen so that there are no leftovers with which to contend, and are a variety of our favorite meals. These run from spaghetti and meatballs with homemade sauce, ham and bean soup, to some of my favorite vanilla pudding with cookies. One may home can your favorite chili, soups, stew, fruits and prepared vegetable dishes. This process is not for everyone and requires a lot of time, effort, equipment and supplies – but there is a tremendous personal satisfaction in eating your favorite home cooked meals when everyone else is sucking on a dehydrated food packet.

As an added twist to the breakdown of transportation, your own personal transportation needs and abilities are likely to be affected as well, though maybe not to the extent as the delivery of goods to market. If fuel is in such short supply as to halt delivery of goods, it is also likely to keep your ability to travel about your town nearly equally

limited. I have a bit of gasoline stored at my storage building, but therein is some added challenge. First, the storage of fuel in Public Storage facilities is typically in violation of the terms of the rental agreement. I have chosen to do this, nonetheless, willing to take the risk of being caught in violation of a rental agreement as opposed to being caught unable to drive my vehicle for a time. Having a garage or outbuilding on your own property makes this legitimate, but in all circumstances comes with danger inherent in the storage of highly combustible materials. Extreme caution is advised if you decide to store gasoline in any location; and by all means use only federally approved containers for doing so. The unvented type will keep the smell down in the proximity of the containers, but comes with the added risk of the effects of high temperatures upon the fuel. If you live in an area where the storage area will be above 90 degrees or so in the summertime, then the vented containers should be used. Secondly, gasoline only has a storage life of 9-12 months and the stock must be rotated in order to have usable fuel in the time of need. That requires that you make it a habit to use up the fuel in the containers and refill them on a regular basis. It is time consuming and possibly messy, but if you are serious about storing fuel it will be needed. Obviously, no matter the use of

the gasoline, for your portable generator or for your vehicle, the demands are the same.

If you have the luxury of having a portable generator that uses diesel fuel, it has over twice the shelf storage time of gasoline, and can be extended with a chemical agent for even longer. I suppose having a diesel vehicle would help in this matter, but I rarely see a diesel vehicle with much fuel economy, and in times of real shortage the most economical vehicles will be in most demand.

If you have the ability, this is where a scooter will come in handy. They get excellent fuel economy, usually upwards of 100 miles per gallon depending on your terrain and driving habits, and the smaller ones do not require a specialized license to operate. I have a motorcycle license, so that opens up a larger world of more powerful vehicles at my disposal. If you have neither, then remember the old fashioned bicycle; they are inexpensive and readily available. Do not forget to stock spare parts – tubes, tires, chain parts, lube, etc. – and a couple of good hand-operated inflation devices to keep you mobile for a good period of time. Safety devices are important as well, so have a couple of good helmets and lock and security for your wheels.

## COMMUNICATIONS BREAKDOWN

One never knows how communications will be affected by disaster, but if the events around Hurricane Katrina or the Alabama Tornado Outbreak of 2011 are any indication, the basic communications infrastructure is much less stable and reliable than most Americans want to realize or admit. The severity of a future crisis will determine how much of our communications system is functional thereafter, but wisdom would demand that we plan for the worst and expect the best in this area. Like happened in the two recent natural disasters noted above, you can assume that your cell phone will have no connection and that your home phone (if you still have one) will be as dead. While some domestic satellite signals may still exist, the ability for those program suppliers to uplink to them may be diminished or removed by the catastrophic event. This calls for some creative thinking and possibly some older technology to keep informed in events in the world and keep you in touch with your family or friends. We have discussed options for maintaining a line of communications into your world from the outside with AM/FM and Short-wave radio receivers. It is best to probably forget the possibility of TV news and information, unless you choose to expend your possibly limited electrical

abilities on that purpose. Those battery powered devices for news reception by radio will be the one reliable method of finding emergency information.

But for the personal communications side of things, for which we now depend so heavily upon our smart phones and home phone service, consider acquiring a set or two of the Personal Communications radios that are commonly available at camping supply or sporting goods stores. These little radios have a range of several miles, depending on terrain, and have 16 operating channels which allow many people to use them in close proximity without interference, or permitting one to have many units on the same channel for multiple message distributions. They cost under \$50 for a pair, and will run for many hours of talk time on the AA batteries. They are compact in size, and some even accept the standard headset plugs used in our Smart Phones allowing for a more private communication. Just like your radio, using a headset also extends the battery life of the device. These will accept rechargeable dry cell batteries, and methods for recharging are widely available in the form of solar panels or the previously mentioned hand-crank charging devices if electricity is in short supply.

For longer range communications, the rather antiquated CB radio might be the method of choice. Mostly relegated to some long-haul truck drivers now, they are still commonly available at most large Travel Centers and Truck stops for well under \$100. Requiring 12 volt power, they are most common in an automobile, but the same device can be adapted for home use with a power converter or simply removing an automotive battery and bringing it indoors if commercial power is absent. (With the popularity of sealed lead acid batteries, this is no longer a safety or health hazard as in times past) If transportation is still practical in this time, having your vehicle equipped with such a radio can get you connection to events in your world around your town or even to neighboring ones. I have a few of these radios, though not installed in my vehicles at the present, I have them pre-wired in a manner that they can be done so quickly utilizing a magnetic mount antenna.

It would also be beneficial to get to know someone in your community who is a Ham Radio Operator. These amateur communications gurus have saved the day with local Civil Defense and Emergency Management Agencies many times over in times of natural disaster, often being the only source of communications between those agencies' offices.

It is easy or inexpensive to get into that hobby, but at least knowing who in your community is a part of it can give you access to outside communications like none other. There are search pages on the internet where you can look up Amateur Radio operators, since they all have licenses granted by the FCC to do what they do.

## **STAYING WELL IN A SICK WORLD**

We all need to be well. It consumes a great deal of our time and resources during normal times; when a crisis happens, it will become a challenge and a necessity. We will likely have more demand to try and be safe and healthy with much less resources at our disposal. Herein is the prepping for this of most importance. The previous sections have discussed part of this – the OTC and Prescription drug needs, as well as some basic and advanced First Aid information and supply prepping. This section will discuss a very real threat – pandemic or even serious epidemic spread of disease among the masses. This is also one area for which extensive advance preparation is difficult without yielding to the very extreme fringe of disaster prevention. I have chosen to lean toward a careful common-sense approach and share with you my plans only to give you guidance and encouragement to research and plan according to your own convictions.

There are several methods of the spread of contagion among the masses - through food, water or airborne being the main methods. Of those, the first 2 we can control to a great extent by other prepping methods of having our own supply of food and water

which is known to be without contagion. Apart from an illness spread through the fresh food or water supply before the method of infection is known, we will be able to control much of our exposure. And if those are the ways it is spread and not known, then there is little preparations that can effectively be made. So the main focus of my advance prepping for pandemic control will assume an airborne infestation of some kind, either atmospheric or communicative from others.

The company where I work has a pretty strict sick-day policy: “You sick? You stay home!” And every person has 10 paid sick days for just that purpose. Still, we all manage to pass around the bug of the month among the 25 or so in our office. Imagine if that was a potentially lethal strain of any number of old or still to be discovered illness, and multiply it by millions. You get just a small idea of how easy it will be for something to begin to spread in an airborne environment. The Centers for Disease Control estimate that it will take as little as 72 hours for an airborne contagion to spread coast to coast in this country. And the probability of it happening is no small number; it reaches an almost certainty as the months and years stack up since the last pandemic event in this country happened in 1918.

We cannot stop breathing, so we have to carefully control where we do that, and keep it in our control to the most extent possible. Depending on where you are when you learn of a possible airborne contagion, the best course of action should be to get away from others – one never knows who might be unwittingly a carrier – and into airspace where you have the maximum control. Initially, that can be your vehicle as you attempt to escape to your home. Remember that “max” setting on your automotive air system is meant to re-circulate the inside air; a wise precaution if you are unsure of the status of the outside product. Once home, closing your windows and ventilation system to re-circulate inside air is a precautionary action until you learn more of the threat. This will not keep microbial airborne contagions out of your home which may be present from some kind of aerial biological terrorist attack; that would require you moving into a vacuum – a pretty short lifespan is typical in that environment, no matter how skilled a diver you may be. But it will help minimize an initial risk of infection from the public spread of a person-to-person type of illness.

And just to clear up an Urban Legend – those plastic sheets and duct tape scenarios are basically bunk. Not only do they not keep out any true

airborne contagions from a biological attack, they can actually lead to more problems by sealing your home too tight. Many items and surfaces in our homes give off gasses which need to be vented from our homes for us to remain healthy; while this practice may not cut off the oxygen coming into our homes, the breathing process of humans give off carbon dioxide which can lead to suffocation and poisoning if it is not permitted to exit our homes in a reasonable manner. These plastic sheets and duct tape only make that situation more likely and should be avoided for this kind of use. They can come in handy to keep rain out of a broken window but not for contagion control.

Once more is known of the type of contagion being spread and its communicability, you can move toward letting outside air into your home, if the seasons would demand it. Having this crisis in the dead of winter would have its decided advantages; the heat of summer can make this one uncomfortable time to endure. Still, a bit of fresh air is good for more than the soul, so getting some of it when you have an assurance of the air quality will be healthful. This is also where having reliable sources of outside information from broadcast news organizations and public health authorities will have its greatest impact on our life. It is an understatement to say having at

least a few surgical type masks in your arsenal can be the difference between life and death, as long as the airborne contagion is able to be filtered by the same. There are a variety of types and styles, all available from your local pharmacy to online sources, in just as varied price range. Get supplies of what you can afford, in the quantity you can afford them, and are comfortable stocking; again here, even a few are better than none. At least a few pairs of latex gloves (as long as you are not allergic to the material) are also wise to have on hand, in case venturing outdoors or into any unknown indoor air and surface quality regions is needed. I'm not one who thinks I need to have gas masks or full haz-mat suits in the closet. If you are, then they are both readily available online and are reasonably affordable.

It is a challenge to stock up on very many medications which will be helpful in time of Pandemic, as the types of contagions are already varied – much less a new one yet to be invented by someone of evil tendencies. My response has been to consider that most illness have some things in common – fever, aches, pains, cough, vomiting, diarrhea, rash, etc. – and to prepare for them just as I do for those events in normal life; only to do so in the quantities that may be needed if both of us have the

same things affect us at the same time and for an extended period of time without the ability to run to my corner drugstore. Since it is not safe or legal to acquire prescription based medications and store them for this kind of a purpose, having antibiotics, antiviral and other types of drugs are just not practical. One might read up on some of the homeopathic or natural alternatives to them and be prepared in that respect. I've just decided that if I don't have an OTC on hand to handle a symptom then a good chug of Russian Vodka will either cure or kill.

In the end, this area of being healthy is not that different from any other we have considered – stop and think carefully about your needs, stock up on what you can afford to do, and exercise common sense. After that, I intend to leave it to a Higher Power than me for my survival.

*TICKLE LISTS (To Tickle Your Own Mind to Make Your Own Lists)*

**THINGS THAT I STOCK FOR PREPPING**

Home and Protection:

- 25-Caliber Pistol and Ammo
- A Pellet Gun with Ammo and CO2 Canisters
- Stash of Cash for Emergency Fund
- Goods for Barter (Alcohol, tobacco, coins, medicines, etc.)
- Home Safety Kit:
  - o Flashlight and batteries (lots of them, too!)
  - o Battery Radio
  - o Candles
  - o Fire Starting capability (My Zippo and supplies)
  - o Water Purification tablets
  - o Tarpaulins and Duct tape
- Home Tool Kit:
  - o Hammer
  - o Pliers
  - o Needle nose Pliers
  - o Screwdriver set
  - o Heavy duty scissors
  - o Zip ties and Velcro Strips
  - o Variety of nails and screws.

- My Camping Kit:
  - 2-Person tent and extra tent stakes
  - Assorted ropes, bungee straps, hooks and tie-downs
  - Tarpaulins
  - Portable shower kit
  - Air mattress with manual inflation device
  - Sheets, blankets, etc.
  - Light duty sleeping bag
  - Heavy duty sleeping bag
  - Propane cook stove with several canisters of fuel
  - Fire starting devices
  - Pot and pan
  - Cooking utensils, can openers, etc.
  - Serving utensils
  - Heavy plastic ware plates and cups (easily washed)
  - Silverware (thrift store special)
  - Dish soap and cloths
  - Assorted paper products – napkins, toilet tissue, wipes, etc. all in zip plastic bags
  - First aid kit (minimal)
  - Flashlights and batteries, including LED Lantern

## Home First Aid and Wellness:

- OTC meds commonly used, in 3-4 times normal quantity of supply.
- Special treatment OTC meds – anti-diarrhea, nausea, etc.
- Potassium Iodide Pills (1 per day per person)
- Assorted splints, wraps, supports, etc.
- Creams, ointments for burns, abrasions, rashes, etc.
- Surgical Mask, gloves, etc.
- First Aid Book(s)
- Sewing kit for clothing repairs
- Grooming kit; scissors, etc.

## Home Stored Equipment:

- Alternate Heating Method Prepared in Advance with Fuel
- Small Portable Generator with Fuel
- Alternate Cooking Method Prepared in Advance with Fuel
- Long term alternate lighting (oil lamps, etc. with fuel)
- Entertainment devices (MP3 players, tablets, etc) with recharging ability.

- Transportation Alternatives: Bicycle and parts, etc.
- Personal Communications Devices (walkie-talkies, CB radio, etc.) and power for such.

### Stock of Home Items:

- Bottled Water: Several Cases of 500ml, 1-liter and 3-liter sizes
- Plastic containers for collecting non-potable water (I have 5-gallon buckets with lids, about a dozen is safe)
- Wash pans, containers, etc. for doing laundry and dishes by hand; scrubs etc.
- Hand soap, bar soap, dish soap, laundry soap.
- Drying racks for indoors
- Extra Clothing, all seasons outer and inner wear.
- Extra footwear for multiple seasons and usage.
- Assorted sizes Zip Plastic Bags, trash bags of various sizes
- Unscented baby wipes (for cleaning and personal hygienic use)
- Sponges, wash cloths, hand towels
- Paper goods – paper towels, toilet tissue, napkins, paper plates, paper cups, etc (that can be safely incinerated indoors)
- Personal Care items:

- Toothbrushes, toothpaste, floss, etc.
- Hair care items and products
- Feminine hygiene products
- Vision care (lens cleaner, etc.)
- Health and Beauty Items:
  - Hand soaps and lotions
  - Body wash and lotions
  - Shampoo and Conditioners
  - Skin care items (mostly hers)
- Can Food:
  - Canned Meats (fish, beef, chicken, etc.)
  - Canned Fruit
  - Canned Vegetables (variety)
  - Peanut Butter, Nutella, other proteins
  - Syrup, honey, etc.
  - Salt, spices, sugar, etc.
- Home Canned Foods:
  - Pre-cooked meals (soups, entrées, etc)
  - Jams and Jellies (small jars)
- Dried Foods:
  - Dried fruit slices
  - Uncooked beans, rice, pasta (etc)
  - Canned or Sealed nuts (watch dates)
  - Powdered Milk and other powdered drinks
- Vacuum Sealed Foods:
  - Jerky (beef, sausage, venison, etc)
- Canned / Bottled drinks (watch Use-By dates)





*Jim "Turbo" Turvaville is a Broadcast Engineer living in Colorado and has been in the radio industry for 33 years. His wife has been in the radio industry for 31 years, together they encompass every aspect of a radio operation. For the past 13 years he has been the Corporate Director of Engineering for a National Media Ministry which is headquartered in Colorado.*

*Jim has no formal technical training or education in Emergency Preparedness. There is no implied expertise or professionalism in this writing, it is only a rambling of his personal views and a description of his methods of preparedness for any future disaster. It is meant for your entertainment and to cause you to think of your own situation and whether you should make your own preparations.*