

## BUG OUT BAGS

An Emergency Evacuation Kit, or Bug Out Bag, is an essential element of being prepared for emergencies for EVERY resident living with a couple of miles of any: chemical plant, pipeline, highway, railway, navigable waterway or coastal area... in other words, almost all of us in Chambers County!

The purpose of a Bug Out Bag is to have a “Grab-N-Go” kit that you can snatch up on your way out the door while evacuating from a No Notice emergency such as a toxic “Cloud of Death” moves your way after an accident. That Bug Out Bag will have all of the essential items that you would need for a 3-day stay- away-from-home until the emergency passes.

There are all kinds of YouTube, podcasts and internet ideas and suggestions as to what a Bug Out Bag should contain. They range from a 3-day Stay Away pack, to a complete camp kit for “The End Of The World As We Know It” mobile survival station. But in the end, they all contain some of the same core items:

1. Water
2. Food
3. Medication
4. Clothing
5. First aid kit
6. Hygiene supplies
7. Bathing supplies
8. Flashlights & batteries
9. Ca\$h in small bills
10. Entertainment & comfort items
11. The Bug Out Bag itself

There are a host of other things that can be included in a Bug Out Bag depending upon your own thoughts or needs, such as fire-starting equipment, cooking items, and tools, but these 11 items are the essentials common to most.

Some detailed information on each of these 11 items will be posted on the Chambers County OEM website.

We will cover all 11 of these items, but not all in one article... This will take several postings spread over several days. At the end, we will have given you a GUIDE to What and Why. The ultimate decision of what to include, or not, is yours... as is the decision NOT to have one at all; and so are the consequences of those decisions.

1. Water is dense and heavy to carry in any amount: about 8.5 lbs per gallon. Figure 2 – 3 gallons per person, per day and the weight adds up dramatically. The “Water” in a Bug Out Bag can usually take three different forms: the wet stuff, storage containers, and filtering or purification. We would suggest that your kit contain elements of all three. A couple of military surplus 1 or 2-quart canteens with cups

or stainless steel and BPA-free plastic sports bottles can serve to store, purify and carry a basic supply of drinking water.

A couple of water filtration straws (like the LifeStraw or its competitors) or small multipurpose filtration systems (like the Sawyer Mini or its competitors) make a mud puddle into safe drinking water.

Water Purification tablets have been in use since World War II. They are effective in destroying pathogens in the water, but they take time and can leave water tasting like medicine or a swimming pool. Water purification tablets shouldn't be used in metal containers, so you need to have at least one BPA-Free plastic container.

Boiling also kills pathogens, but if all you have are plastic containers, isn't practical...hence the suggestion to include a stainless steel bottle too.

2. Food is typically bulky and sensitive to temperature so we need something that's light, nutritious, shelf stable, reasonably inexpensive and doesn't need cooking.

Tuna, beef, rice, pastas, vegetables and other foods which have been pre-cooked and sealed in pouches are readily available in your local grocery store. They are relatively inexpensive, need no preparation and can be eaten right out of the package but have rather short storage times and can be temperature sensitive.

Freeze Dried meals in pouches are readily available, lightweight, nutritious and store safely for years...even decades. But they are rather expensive and require water to restore them to normal.

Food bars are typically plant-based amalgamations of fruits, nuts, natural sweeteners and flavorings. Some are classified as Energy bars, others as Protein bars. They are lightweight and take up little room but can be a bit pricey depending upon the brands and types, but a mix of various types and flavors can provide a fairly decent nutritional balance. They tend to be rather sensitive to temperatures and may have a relatively short storage times, but require no preparation. They can also increase your thirst and water intake. You have a variety of choices and perhaps a mixture of several of these will give you a healthy, tasty set of meal choices to last your three days.

There are also specifically made Survival Ration Bars (i.e. Datrex or Emergency Ration). These were originally designed for use in lifeboats as emergency rations and have moved into the mainstream of emergency preparedness. They are formulated to be highly calorie dense for compact storage, yet with low sodium so as not to increase thirst when eaten. These are more like a cookie or shortbread than a meal, but have the major nutrients to keep you healthy for a while. They aren't very filling and they aren't something that you would eat as a snack if you

had about anything else, but they are small, stable and much better than being hungry!

3. Medication is something that can never be taken for granted. Many of our medications are dose sensitive and abruptly stopping them can have serious health consequences. Having a 30-day emergency supply of each prescription medication IN ITS ORIGINAL BOTTLE is essential for any Bug Out Bag. By having the original bottle, you have all of the prescription information so that if a longer evacuation or relocation is necessary, pharmacists and physicians can access your prescriptions. Some medications, like certain forms of insulin, may require refrigeration, while others are sensitive to light (i.e. nitroglycerine, antibiotics). Make sure that you know the storage precautions for your medications when you stock your Bug Out Bag! Along with the medications, an extra pair of prescription glasses and sunglasses can be lifesavers should your regular pair get broken. I still remember the Twilight Zone episode (Time Enough At Last) with Burgess Meredith, as a man who only wanted peace and quiet with a book. He finds himself as the last man on earth in the wreckage of a library. He felt he was in heaven until he tripped and shattered his glasses. Have an extra pair!
4. Clothing should be comfortable and heavy duty like jeans and flannels. Only 2 sets of outerwear and 3 or 4 sets of underclothing & heavy cotton or wool socks is required in a Bug Out Bag. Jeans can be worn a couple of days in a row and washed out by hand if necessary. Clean, dry underclothes & socks are important for personal hygiene and good health so a couple of extra sets is important. Cotton fabric is naturally fire retardant as well as breathes and wicks sweat away during hot weather and insulates during cold weather. It will also protect your skin from ultraviolet rays of the sun and resist abrasions and cuts. Finally, it is relatively easy to wash cotton fabric in a sink, tub or even a pool or stream in more primitive circumstances.

A good pair of sturdy leather boots or shoes will provide protection from glass, nails and debris in the aftermath of a disaster. These should be worn and broken in before putting them in your Bug Out Bag: new shoes, especially boots, can wear blisters on your feet at a time when wearing that protective footwear is not optional.

Don't forget a good raincoat or poncho! Disasters frequently result from severe weather so rain & storms are most likely to be part of the scenario. They can also be used as outerwear when it's cold & windy...they block the wind and help keep you warm.

5. A good, simple first aid kit can be one of the most important items that you carry in your bug Out Bag. Blisters, and other minor injuries are very common during and after emergencies. If not properly cleaned, treated and protected, a simple cut can become a life-threatening infection in only a couple of days! The Emergency Medical Services resources are at their greatest service demand during disasters so you may be the only provider of first aid for minor injuries for days. A good, quality first aid kit (and the knowledge to use it effectively!) is every bit as essential as each of the previous 4 pieces of equipment.

Supplies ranging from emergency medical gear like a tourniquet and some triangular bandages to antibiotic ointment and various sized band aids should be in your kit. Include some over-the-counter: pain medications, allergy medicine, anti-diarrhea medicine, antacids and other non-prescription items in your first aid kit. Unless you are an EMT, Paramedic or other trained medical person, leave the fancy tools and exotic medical equipment out of your kit UNLESS it is specifically for YOUR health: don't carry needles, syringes, sutures and similar equipment in your Bug Out Bag. You can do far more damage using these things improperly than you will ever help and if you don't have a license or prescription for those items, you can get into trouble for having them!

6. Along with a good first aid kit, a good personal hygiene kit is a significant part of protecting your health & well-being. Bathing soap, toothbrush and toothpaste, shaving kit, a small roll of toilet paper, and a supply of feminine products are all essential to help maintain your health during what will typically be some very high stress times. Brushing your teeth is a must in order to keep your overall health intact and just to keep feeling healthy and clean. Many health problems begin as a problem in your mouth: teeth or gums, and spread from there, so you MUST practice oral hygiene to maintain your overall health.
7. You may not get to take a shower or bath for days or longer, but you can still take a sink bath with a bar of soap, water and a towel to maintain your health. Disasters tend to be very dirty and generally unhealthy environments overall. Dirt, toxic materials, and disease organisms abound and contaminate your skin where they can begin degrading your health. Cleaning (decontamination) that filth off of your skin at least daily is essential to your continued health. Good old soap and water is the most effective method of removing that stuff from your skin without adding to your skin damage like 'waterless cleaners' can. A "G.I. bath" using a container of clean water to wet a cloth, soap up, and rinse off will go a long way to decontaminate yourself and make you feel cleaner, which, in turn, improves your overall comfort and sense of well-being.
8. Very few of us like the dark; especially when we are in unfamiliar surroundings or in a time of danger during an emergency. Our eyes are specifically acclimated to

seeing efficiently in daylight. Our eyes lose most of their acuity, color sense and depth perception in the dark. If it's a moonless night, we may actually be functionally blind as our eyes have little capability without some light.

The current, and evolving, flashlights using Light Emitting Diodes (LEDs) yield a great deal more light per unit of battery energy than our previous incandescent flashlights of just a few years ago. New lithium batteries tend to last longer and yield more energy quicker than alkaline batteries. All of this makes it worth the money to buy some new LED flashlights to replace those you may already have. As far as what type of batteries: rechargeable, AA, AAA, CR123, etc., it has been my experience that having flashlights that have AA or AAA batteries tend to be easier to find replacement batteries than any other type. Rechargeable batteries always seemed to be dead when I needed my flashlight because I didn't take them out and recharge them regularly.

Never have only 1 flashlight: one rule of tools for firefighters is "having one = none, and having two = one". If you only have one piece of critical equipment that you now have to depend upon, Murphy's Law would rear its ugly head and that equipment would fail. I quickly learned to carry at least 2 flashlights and 2 sets of spare batteries.

It's your choice what type, how many, what battery configuration and what manufacturer you choose. Do your homework, read reviews, ask police, firefighters and EMS folks what they use as they put them to hard use. But, have flashlights and extra batteries!

9. One of the first things that fails in almost any emergency condition or disaster is the electrical grid. That means that your debit card, Apple Pay, and other electronic money access is shut down...totally. One thing that never fails is cash, so make sure that your Bug Out Bag is supplied with cash... and in small bills! You may need to buy something where the seller has no change for the \$20. While there isn't any formula for determining how much cash you should have in your Bug Out Bag, I would suggest that you consider \$30 - \$50 per day. I would also suggest that the cash be in \$1, \$5 and \$10 bills and a roll each of pennies, nickels, dimes and quarters so that making change isn't an issue!

Put your money in a separate small bag separate from all of your other things and secure it inside the Bug Out Bag so that it can't fall out if the bag gets dropped or falls over.

10. Entertainment items like books, playing cards, checkers or other non-power dependent entertainment can help keep your mind occupied during waiting periods. Comfort items like favorite pillows, air mats, pads, fuzzy slippers or similar things can make long waiting periods and sleeping on unfamiliar beds, cots or the floor more tolerable. Disasters and emergencies are very stressful, your rest and

relaxation time is critical to maintaining your health and keeping you safe during very unsafe circumstances.

11. And the final item for discussion in the development of a Bug Out Bag is the bag itself. This is the container that we are going to store our critical items in so we need to ensure that it will do its job effectively.

It needs to be sized to hold all of our stuff and maybe a bit bigger to allow us to add some things at a later time. You might want to lay out all of your items and find a cardboard box that will hold it all. You can measure the box and then get the pack, bag, duffle bag or suitcase that holds a bit more than that.

It needs to be strong enough that it won't fall apart if it gets knocked around, dropped off a truck, rained on, or chunked in a corner. You might want to consider getting a U.S.G.I. surplus backpack, duffle bag or similar container. We have had great luck with ALICE packs. They are very lightweight and durable, inexpensive and very common. The newer generations (MOLLE) packs are made of a canvas-like material that is considerably thicker and, therefore, heavier. They also tend to be a bit pricier, but are modular. Both of these backpack systems can be used with a frame (improves the structure of the pack especially if it's a very heavy pack) or without frames (softer and easier to stuff into tight spaces). A U.S.G.I surplus duffle bag is very durable (ask sailors or Marines) and will hold a lot of stuff. The latest versions have shoulder straps like a back pack.

There are lots of commercial and sportsman's backpacks and duffle bags at sporting goods and outdoor sales outlets. They can run from a few dollars to several hundred dollars in costs. Choose your equipment wisely, the failure of the zipper that holds your pack closed or a shoulder strap tearing loose can be a real problem when you are depending upon that pack to keep your stuff together.

Any discussion about Bug Out Bags will inevitably lead to the topic of defensive or protective equipment, including weapons. The decision to or not to include defensive weapons as part of your Bug Out Bag is a very personal one with potentially grave legal and life safety consequences either way. We recommend that you research and consider all of the consequences, laws, required training, and circumstances that you may face. Talking with a seasoned Law Enforcement Officer and your attorney will also provide you with invaluable guidance. Then, YOU make the best decisions for YOU and YOUR FAMILY.

Overall, the main take away from this lengthy discussion is that if you live in Chambers County, you are at risk of having to leave your home in a hurry to flee from a life-threatening condition. The wise precaution for that eventuality would be

to create a Bug Out Bag which would enable you to be self-reliant and comfortable during the emergency period. Only YOU can determine what needs to be in YOUR Bag, but there are 10 essentials that you really must include.

Keeping your family and yourself prepared to deal safely and effectively with an emergency is another form of life insurance. The choice to be or not to be prepared is yours.... As are the consequences: Choose Wisely!