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FIRE SAFETY & SURVIVAL

THE AMERICAN CIVIL DEFENSE ASSOCIATION
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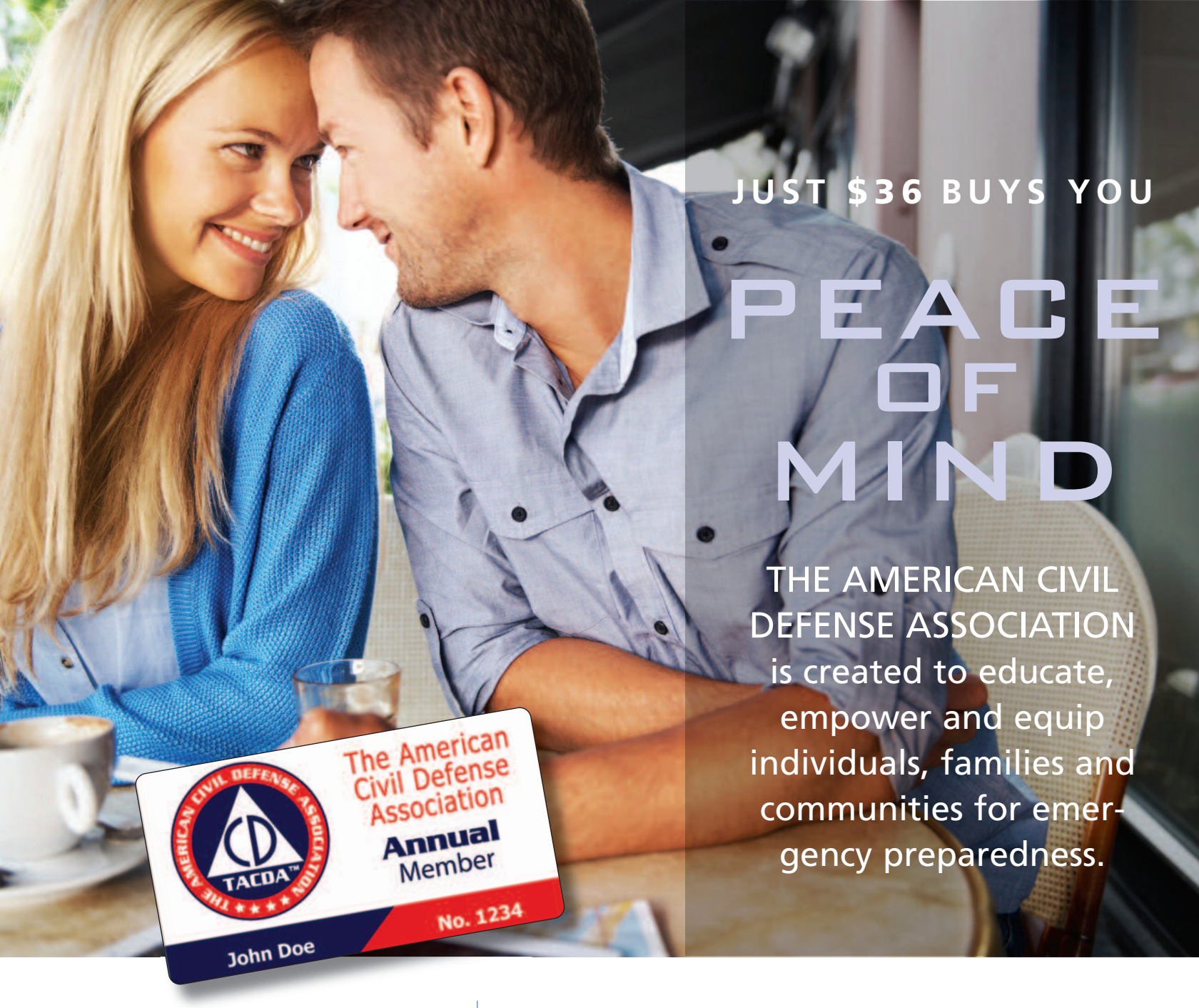

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TACDA
12162 South Business Park Dr., #208
Draper, UT 84020
www.tacda.org
info@tacda.org
Office: (800) 425-5397
Fax: (888) 425-5339
ISSN# 0740-5537

PRESIDENT'S MESSAGE

TACDA has been educating people about preparedness for over 50 years. In the 1960's we were all very concerned about a massive nuclear attack. As time passed most nuclear powers became more aware of mutually assured destruction (MAD) and the perceived threat became less.

TACDA continued educating our members about the nuclear threat but also focused on natural disasters. We have written articles on earthquakes, hurricanes, floods, winter storms, tornadoes, and solar storms.

After 9/11/2001 we needed to address terrorism which comes in many different forms. Computer hackers stealing our personal information, trying to hack the electric grid, creating a financial collapse, detonating a nuclear device in a major city or a biological attack.

ISIS is better funded and more sophisticated than terrorists of the past. It is not out of the question they could launch an EMP attack that would also take down our electric grid. A long term grid down is a terrible scenario. The Naval War College said it is possible that 90% of the population of the U.S. could perish in the first two years.

Looking at all the different disasters to prepare for; where should we start?

Many books have been written on how to prepare and I suggest if you are just starting, stick to the basics.

- Water purification
- Food
- Medications and first aid supplies
- Sanitation and hygiene needs for the whole family
- Communications equipment
- The ability to defend yourself and your family
- Be mentally, physically, and spiritually prepared.

You can review previous *Journals* dealing with all of these subjects or check out the TACDA Academy Lessons.

Remember when the time of need arrives – the time to prepare has passed.

William David Perkins
President
E-Mail - kd4fjl@att.net

FROM THE **EDITOR**

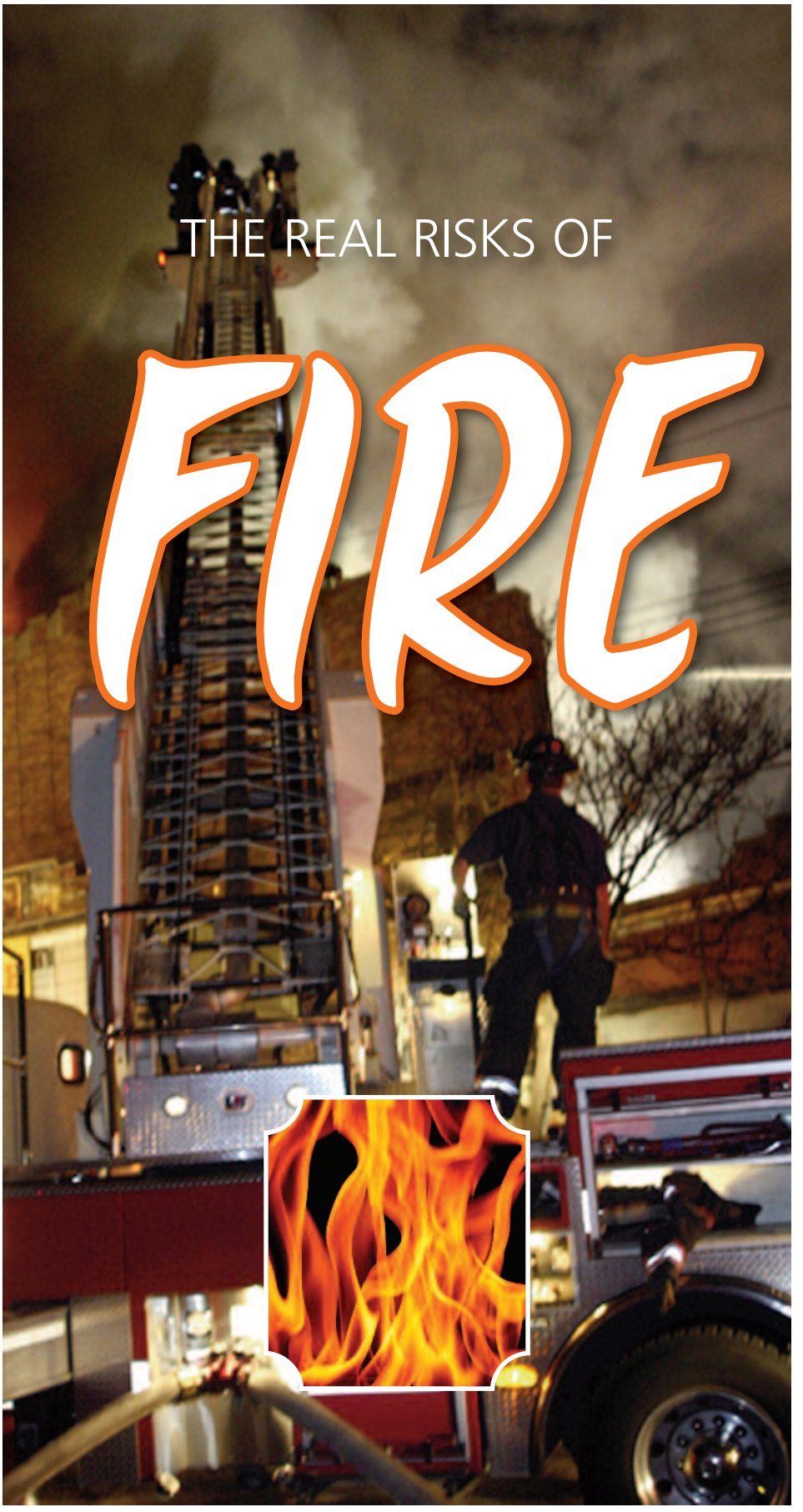
We are honored to present to you another valuable edition of the Journal of Civil Defense. I appreciate our contributing authors who share their expertise to enrich the lives of others and make the world a better place. Polly and Lisa do an amazing job of making the Journal look fabulous. A heartfelt thanks to all of you.

The state of the world continues to rapidly decline, making our personal preparations for challenging times a critical priority. Natural disasters occur with increased frequency. We are constantly on alert for acts of terrorism, crime and threats from abroad. Catastrophic economic collapse is just around the corner as our government continues down the path of corruption. Our future does not hold the promise of peace and prosperity we had envisioned in our youth.

Notwithstanding the chaos in the world around us, there is peace to be found. We can make a difference in our own communities as we love and serve one another. We can refuse to be a part of the problem and live lives of integrity. We can do everything in our power to prepare and be part of the solution. We can move forward with faith and refuse to allow fear to influence our actions.

Prepare well, my friends. Together we can survive anything!

God bless you,



FIRE SAFETY AND SURVIVAL

By Jay Whimpey, PE
TACDA Board Member

There are over 360,000 house fires in the US every year with a substantial number of injuries and deaths. Eighty percent of the deaths and injuries occur in residential structures, with most of those fatalities occurring while those people are asleep. We can reduce the risk of death or injuries by fire through understanding how and where fires start and how to prevent the fires and ensure prompt notification if a fire occurs.

Studies of fires during emergency situations show a substantial increased risk because of the frequency and severity of fires when individuals and families are using cooking and heating methods that are less familiar and more hazardous than they normally use. The principles and methods for preventing fires and protecting ourselves apply both in our everyday lives and emergency situations.

Asphyxiation, or lack of oxygen, causes most fatalities in fires. A fire is dangerous because of the direct exposure to heat and flames that can burn us, super-heated air that can damage the lungs and breathing passages, inhalation of toxic smoke and gases, and simple lack of oxygen. Calculations show that a typical house with 2000 square feet of living space with 8-foot ceilings has 16,000 cubic feet of air and 20.8% of that air by weight is oxygen. At normal conditions, there is roughly one pound of air in 13 cubic feet. So there are about 1,230 pounds of total air and about 260 pounds of oxygen in the house. If a fire starts and begins to use that oxygen to support the combus-

Carpet Fire

Electrical Cord Fire

tion, it only has to use about half of the oxygen before a human would be largely incapacitated and incapable of escape due to lack of oxygen. A human will lose consciousness and die when an additional 5% of the oxygen is gone. When most materials or fuels burn, they use roughly two pounds of oxygen for each pound of fuel. This includes most carpets, plastics, and wood furniture. So a fire only has to burn 65 pounds of fuel before it is impossible for people in the house to save themselves from the advancing fire. That corresponds to the weight of a single piece of relatively small furniture or a moderate section of carpet.

In an underground shelter that is 10-feet in diameter and 50-feet long there is only 4000 cubic feet of air and it would only take 16 pounds of fuel burning to make the entire shelter deadly to any occupants.

Studies have indicated the average house today can overwhelm the inhabitants by asphyxiation in roughly **two minutes** once a fire starts because of the fast burning nature of many of the materials that we use for making carpets, furniture, and electrical appliances. The cotton, wood, and wool that we formerly used to make carpet and furniture have been replaced by nylons, polyesters, and other plastics that burn much more readily. The solid wood that was formerly used in furniture has been replaced by plywood and particle board which contain a substantial amount of highly combustible glue or resins. Prompt notification of a fire, especially when we are asleep, is critical to survival.

Fire Prevention and Elimination

The most common type of fire in the home is caused by cooking on a stove top. Of course most of the fires are small and can be contained quite easily. The fire inside a pan can be snuffed immediately but we should remember to keep a pan lid within easy reach while cooking. A small fire blanket is another option for fires that have spread beyond the pan but are still contained on the cook top. The use of salt or baking soda is also useful but we should be careful not to spread the flaming materials while applying the salt or baking soda. Other combustible powders such as wheat flour or sugar will feed and spread the fire. A fire extinguisher is also useful but can possibly spread the fire if not used properly. The cook top should always be attended to prevent small fires from growing.

Electrical appliances can also be the source of a fire. A loose electrical connection where the resistance at a connection can generate heat and start a fire on the wiring insulation and surrounding combustibles. A short in the power supply or transformer can also create heat and start a fire. The fires that may have been largely contained in the steel case of the appliances in the past are now able to spread to the plastic on circuit boards and electrical leads and then on to the plastic housing. It reduces risk to unplug appliances when not in use and reducing the overall number of appliances that we use. For example, we should carefully consider whether we actually need an electric can opener. Such appliances have started fires before.

The use of candles, lanterns, and heaters with a live flame should be minimized and such devices should never be left unattended. Fuel should be stored in a separate area and the fuel should not be added to the devices when they are hot. Fueling should preferably be done outside.

Electrical outlets should not be overloaded and the connections on power strips and other electrical distribution equipment should be cleaned regularly. The dust buildup behind cabinets and entertainment centers where there are electrical connections should be cleaned to control dust buildup. Inspect electrical connectors

Particle Board Fire

Wood Fire

for signs of heat or poor connections.

The storage of fuels and other chemicals in the garage or utility areas of the house should be minimized.

The dryer vent and dryer itself should be cleaned regularly to clear lint and other combustibles.

The storage of combustible materials in the laundry and utility areas of the house should be minimized.

Bathroom fans should periodically be cleaned and inspected.

Fire Response

It should be emphasized that the primary responsibility of everyone in the house is to get out of the house as quickly as possible if there is a fire. To that end, an escape plan should be prepared that includes designating multiple escape routes for every room in the house, a single meeting area outside the home, and plan to notify the emergency response personnel. It is important to actually discuss and demonstrate the plan for younger members of the family and make sure they can actually open windows and exit the window openings if that is part of the plan.

Proper equipment should be stationed at appropriate areas such as fire extinguishers near the doors. Fire blankets should be provided near the kitchen for smothering kitchen fires and other fires where appropriate. A wooden bat or similar tool should be provided to help open windows where appropriate. A fire can create a significant vacuum draft in a home when it finds a place to vent and that can put a negative pressure on widows, making them difficult to open. Thus a wooden bat for breaking the windows, if necessary, should be stationed near the windows designated for escape. A step stool in the vicinity of the window can help to egress the window and a flexible ladder for the outside of the window, if the window is on the second story of the structure, are also advisable. Special locator stickers should be placed on bedroom windows to notify emergency responders or even neighbors where people in the house normally sleep. The stickers can save time in rescuing the people in the house by directing the response to the right rooms.

Fire Alarm Equipment

The most important pieces of fire equipment for protecting the people in the house are the smoke, heat, and carbon monoxide detectors. The people in the house must rely almost entirely on the detectors while they sleep. As stated earlier in this article, the lack of oxygen kills or incapacitates most victims in their sleep and they die in their beds with no chance to escape.

The most disturbing information about the common smoke detectors in most homes is that they do not work in a timely fashion in many actual fires. The documentation that accompanies most ionizing smoke detectors indicate that they will not work in up to 35% of all fires. There is also a substantial amount of information enumerating the situations and types of fires where the detectors would not be expected to work that seem designed to limit the amount of liability for the manufacturers.

Actual studies have found that the ionizing smoke detectors do not work in roughly 55% of actual fires. They do work many times when the toaster burns a piece of toast or when food is broiled leading to a false sense of security, but when it comes to a real fire burning the actual furnishings or carpets in a house that produce fewer larger particles than when the toast burns, they do not warn the occupants in the structure in time to allow them to escape. Please refer to a short video on YouTube called “When Seconds Count” for some additional information and accounts of testing and actual fires where the smoke detectors failed to provide adequate warning.

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Everyone's ALLERGIC to Something!

How to Treat Yourself and Get Professional Results

By Cynthia J. Koelker, MD
www.ArmageddonMedicine.net

IF you live in Ohio (as I do) everyone suffers from hay fever. Though it actually has nothing to do with hay or fever, seasonal ragweed allergies keep doctors busy during the late summer months.

Not *everyone* is allergic, you may argue. True enough. But this information does apply to everyone, whether you have allergies or not. Many people experience conditions with allergy-like symptoms, even though the cause may not be a true allergy (think cough, runny nose, sneezing, itchy mouth, head congestion, itchy eyes, rashes, nausea, diarrhea, itchy skin, hives, wheezing, trouble breathing, swelling, low blood pressure, fatigue, weight loss, autoimmune disease, death). Surely you've experienced at least one of these!

A true allergy is a reaction (or a predisposition to react negatively) to something in the environment to which you are exposed by any route, whether via inhalation, skin exposure, ingestion, injection, or even vaginally or rectally. However, exposure to a foreign substance can cause other types of reactions as well (consider smoke inhalation, chemical burns, stomach irritation, intestinal upset, friction burns, poisoning, etc.). Given a particular symptom, hives for example, it's not always possible to know if the cause is truly allergic or otherwise.

A further source of confusion is that there are several different types of allergic reactions. The immediate kind is easiest to identify, such as a bee sting allergy, which is termed a Type I reaction, and occurs within an hour of exposure. (Biologically, Type I reactions are mediated by IgE, an immunoglobulin.) This type of allergy causes an abnormal release of various chemicals in your body, including histamine. These chemicals cause blood vessels to dilate, capillaries to leak, mucus to be secreted, and smooth muscles to spasm (among other reactions).

This is the type of disorder that underlies seasonal allergies such as hay fever, allergic asthma, and sometimes swelling, hives, certain food allergies, anaphylaxis (or even death).

Type II reactions are much less common, but are responsible for organ rejection after transplantation.

Type III allergies sometimes go unrecognized because the allergic response does not occur until about 2 to 9 hours after exposure to the offending agent. Type III reactions account for serum sickness, farmer's lung, and mushroom picker's disease, among others. A carpenter friend of mine may have such an allergy, but declines to be evaluated for hypersensitivity pneumonitis. He certainly fits the pattern. Acute symptoms include cough, chills, wheeze or chest tightness, and body aches, symptoms which generally resolve on their own when the sufferer is removed from the offending agent for a period of several hours to days (which is difficult to do for a carpenter). However, if exposure persists, a chronic condition may develop that can cause permanent scarring of the lungs with subsequent difficulty breathing, fatigue, and weight loss.

Lastly, who has never suffered poison ivy or poison oak? If you have, you know these reactions begin at least several hours but more often a day or two after exposure (and the reaction may continue for several days to a few weeks). Poison ivy is a classic example of a Type IV reaction, also fairly common, and is caused by a different chemical pathway within the body (T-cell-mediated). Many drug allergies are Type IV reactions, and again, they are not always recognized since the reaction may occur later than expected. "Infected pierced ears" are often not infected at all but rather a Type IV metal allergy.

Also, these reactions may depend on degree of exposure. Another friend claimed immunity to poison ivy but found out otherwise after he'd spent a day weed-whacking my poison ivy patch.

If you've read this far, you now know more about allergies than probably 95% of the population. You're practically an expert, at least at classifying allergic reactions.

But what about diagnosis and treatment?

Physical symptoms do not come with labels attached. A symptom such as a cough or a rash is a clue to the diagnosis, but only a clue. Whenever possible doctors try to identify the cause of a problem, though at times this is not possible and we simply treat the symptom instead – usually with success.

To make a diagnosis, doctors look for patterns of illness. You get stung by a bee, then develop itching and trouble breathing within minutes. That's an easy pattern, typical of a Type I reaction. But what if you take penicillin for a sinus infection and develop a cough a few days later? Is the cough from drainage or from a drug reaction? It may be difficult to tell, especially the first time this occurs.

Reactions consistent with an allergy are a set of typical symptoms that occurs (or usually occurs) after exposure to an antigen (the substance causing the reaction, such as pollen or peanut butter). This still does not always indicate true allergy. My daughter sometimes gets hives after a shower or swimming, but she's not allergic to water. I often sneeze three times after getting out of bed, but I'm not really allergic to morning.

The good news is, the same approach often works whether the problem is an allergy or not, which is one reason I said this information applies to everyone. Also, if you yourself are not allergic, odds are either a family member or a friend is. If you are preparing for future disaster or a time when a doctor may not be available, it's a great idea to understand allergic reactions and to be able to help an allergy sufferer.

Step 1 regarding allergy treatment is avoidance. If at all possible, try to identify the cause of the symptoms and stay away. If I'm around cats, I want to scratch my eyes out…sufficient reason for me to avoid Tabby. My daughter reacts to grass with similar symptoms and is happily excused from mowing. Some people stay inside during the spring tree allergy season or fall weed season. Certain schools forbid peanut butter in the lunch room. I never buy wool clothing or rabbit fur trim, and might die in a leopard skin coat. (Note – leopard skins have been banned as endangered furs.) If you're allergic to dust, avoid dust-gathering furniture, bedding, and carpets. If horses and barns make you wheeze, don't buy a Clydesdale. This is all common sense, but you'd be surprised how many people insist on sleeping with their pets, even when they know it will make them sick.

Theoretically, allergy testing could be done by the layperson, but might also be dangerous, particularly for someone severely allergic. However, if you believe you are allergic to one item but don't know which, for example certain grains, an elimination diet may be useful. This can be done either by eliminating one item at a time for several days, or by eliminating all potential suspects for a few weeks and then re-introducing them one at a time, several days apart, while observing for allergic symptoms. Also, if you are allergic to a certain food, it may be worth investigating whether you would be likely to react to other foods which share the same or similar proteins. For example, kiwi is related to bananas, avocado, watermelon, cantaloupe, and peach. If allergic to kiwi, perhaps you should avoid them all. Detailed information about related food groups is freely available online.

hat if you have allergies but can't avoid the trigger for your symptoms, or simply insist on sleeping with Snoopy? Or what if you have symptoms but can't be sure if they are truly allergic?

This is where medications become useful. Under Type I allergies, above, I mentioned that these reactions trigger histamine release, which leads to congestion, itching, swelling, and increased mucus. Anti-histamines block this reaction, to a varying degree. It is often better to block such a reaction before it occurs rather than wait until symptoms begin.

Doctors don't have a huge arsenal of prescription medications available to the non-professional. Currently more allergy medications are over-the-counter than by prescription, and many that were once by prescription only are now available over the counter at a lower cost. These include Claritin, Allegra, Tavist, Zyrtec, Flonase, Nasacort, Nasalcrom,

Zaditor, Zantac, and Asthmanefrin. What doctors do have is the knowledge to use them properly and effectively. However, the informed patient could treat himself or herself with equal success the majority of the time.

Antihistamines are the mainstay of allergy treatment, but each has slightly different properties. One difference is side-effects (which can sometimes be considered desirable effects). Sedation is common with diphenhydramine (Benadryl), clemastine (Tavist), chlorpheniramine, and doxylamine, but generally less common with cetirizine (Zyrtec), loratadine (Claritin), and fexofenadine (Allegra). Any one of these could lessen symptoms of runny nose, itchy eyes (or other itching), cough due to drainage, sneezing, and sometimes congestion. Some people respond to one better than another, and some people get drowsy on the so-called non-sedating antihistamines, while others react opposite and become "wired" when taking sedating antihistamines. Beyond general guidelines, the best answer is to try a few on yourself and see which best suits your own chemistry. Also, in general, the sedating antihistamines seem to work better for allergy-like symptoms due to colds or infections than do the typically non-sedating antihistamines, but this is not universal. Ranitidine (Zantac) is a special type of antihistamine, an H-2 blocker, a bit different than the H-1 antihistamines generally used for cold or allergy symptoms. While it is primarily indicated for heartburn or stomach ulcers, it is also effective for hives (but not likely for nasal symptoms).

Some people (like me) actually respond better to a decongestant than an antihistamine. Pseudoephedrine relieves my congestion and drainage better than any antihistamine. This is partly my individual allergic response, but also because some degree of my nasal symptoms is not true allergy, but rather vasomotor rhinitis. If I never had to get up in the morning I would be fine…but wouldn't get much done. Vasomotor rhinitis, sometimes called non-allergic rhinitis, acts much like allergies, but symptoms are triggered by different stimuli, such as a change in weather or humidity, foods, odors, or medications. Fortunately, the same OTC medications can be used to treat non-allergic rhinitis as true allergic symptoms.

What if you have allergies but can't avoid the trigger for your symptoms, or simply insist on sleeping with Snoopy?

Since pharmacies now require a signature for pseudoephedrine (the original Sudafed), a different decongestant has been substituted in the popular OTC version, now Sudafed PE, namely phenylephrine. In my clinical experience, phenylephrine does not seem as effective, though many people experience sufficient relief.

Decongestants, in general, are unlikely to cause drowsiness, and often have a caffeine-like effect, improving alertness. However, also like caffeine, they can cause heart palpitations in susceptible individuals, and sometimes raise the blood pressure. (And a few people do suffer drowsiness with decongestants.)

Pseudoephedrine is most commonly used for congestion of the nose, but is also sometimes effective for congestion of the eyes or bronchial tubes, and even helps asthma to some degree. For asthmatics, this is worth knowing, since it may spare the use of prescription medication.

So far, for your personal supply of medications, I recommend finding the best sedating oral antihistamine for you, as well as a non-sedating version. Sedating antihistamines are great for nighttime symptoms, and can do double-duty as sleep aids. Additionally, lay in a supply of OTC decongestants for congestion, and possibly to aid alertness. In general, oral antihistamines are cheaper than topical antihistamines, although you may want to experiment with topical products such as ketotifen eye drops (Zaditor).

For the person who experiences too many side effects with an oral product, nasal steroid sprays are both safe and effective (Flonase, Nasacort). Although administered via the nose, they sometimes also improve eye symptoms and cough. Either of these may also be taken with an oral antihistamine or decongestant. Although most people experience no side-effects, an occasional person will experience nose bleeds or sore throat, or develop thrush (oral yeast infection) with the use of these products.

If the idea of steroids bothers you, and you can't take oral medication, you may want to try cromolyn (Nasalcrom), a non-steroid nasal spray (a mast-cell stabilizer, also formerly by prescription). Cromolyn is very nearly free of side effects. It can also be combined with other allergy medicine.

Serious allergic reactions are beyond the scope of this article, except to say avoid what you're allergic to and make a plan now, while options are available. For emergency purposes, keep an Epi-Pen on hand. Get a new one every year and keep older ones for a back-up. The epinephrine (adrenaline) will help an immediate allergic reaction quickly, but it doesn't last long. You should also have a supply of oral antihistamines with your Epi-Pen, preferably something you've tried before. If you cannot afford an Epi-Pen, have Asthmanefrin on hand, a similar OTC preparation in inhalation form, and much less expensive. Make sure to read the directions and know how to use it in an emergency situation.

These recommendations may sound like, "Try a little of this or a little of that until you find what works." But that is, in fact, what a doctor would recommend. As a family physician and fellow allergy sufferer, I've treated thousands of patients with allergies and tried many remedies myself. There really is no perfect answer. Barring previous medication history, a doctor cannot say for sure which alternative is best for you. Some combination of the OTC drugs I've listed will work about 90% of the time. The other 10% gets more complicated. These OTC medications are not watered down versions of prescription drugs – they are the same medications. However,

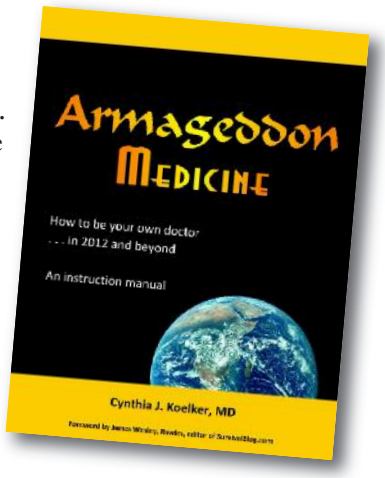
certain generics may not work as well – I've tried some of the super-cheap varieties with variable results. Although the amount of drug contained in these generics is regulated, their absorption may vary. Don't rule out a drug's effectiveness until you've tried the brand name.

In summary, a reasonable approach is to:

- Try to identify what you're allergic to and avoid it.
- Try several different antihistamines and evaluate both effectiveness and side-effects.
- Try a decongestant either alone or in combination with any antihistamine.
- Try a steroid or cromolyn nasal spray either alone or in combination with any of the above.
- Consider an elimination diet for possible food allergies.
- Have Asthmanefrin on hand for a serious reaction (if an Epi-Pen is not available).

If you do nothing beyond avoidance, most common allergic reactions will resolve on their own within a few hours to several days, including poison ivy. The body heals itself, medicine only paves the way.

For more information on how to treat hundreds of conditions on your own, visit my web site at www.ArmageddonMedicine.net.



About The Author: Cynthia J. Koelker, MD is the author of the book **Armageddon Medicine, How to be your own doctor in 2012 and beyond**. She also hosts the popular Survival Medicine web site www.armageddonmedicine.net and teaches Survival Medicine classes across the country. Currently available classes are listed on her web site.

DISASTERS MUCH BIGGER THAN SAN BERNARDINO:

What Candidates Need to Talk About

By Jane M. Orient, M.D.

After every shooting episode the response is the same formula: constant media coverage, much of it fact-free, and calls for thoughts, prayers—and still more gun control. It's time to take a broader perspective than a focus on the dozens of individual tragedies.

Today, Americans are targets. Not just individual Americans, but also the United States of America. They are targeted by deranged individuals, by fanatical ideologues, by drug cartels, by terrorist organizations, and by foreign powers, some of whom have intercontinental ballistic missiles with multiple independently targeted nuclear warheads aimed at American cities.

Our thoughts need to turn to what is really going on, and our prayers need to include "God save the United States of America."

We have pervasive surveillance of our financial transactions, our telephone and electronic communications, our medical records, and our movements. The government has enormous powers of search and seizure, many unthinkable to drafters of our Fourth Amendment, and these are used against Americans engaged in normal business that threatens no one. We already have lots of gun control laws.

So how were terrorists in San Bernardino able to accumulate bomb-making material, an arsenal of weapons both legal and illegal, and body armor, without spurring any action by the authorities?

Terrorists have also engaged in operations that don't yet have any poster children but that are far more dangerous than shooting up a Christmas party, such as disabling a key electrical substation. This shows the capacity for coordinated, sophisticated operations that could cripple the electricity grid for a long time.

Candidates such as Donald Trump and Ted Cruz call for controlling illegal immigration—surely necessary, but insufficient. The San Bernardino terrorists were here legally.

Here are the real issues that we need to discuss:

Americans are mostly helpless victims. The government that is supposed to protect us, though awesomely powerful, appears to be incompetent, corrupt, or—dare we suggest it?—on the other side. Americans are divided by a culture of grievances. America is dangerously weak. Foreign policy is recklessly provocative.

Some candidates, including Trump and Cruz, support the right of Americans to own effective tools of self-defense. But none are talking about the long-standing official government stance of keeping Americans as vulnerable hostages to nuclear weapons. Rudimentary civil defense was dismantled long ago; Americans don't even know to drop and cover if they see a bright flash. Nuclear terrorism—the belief that the negligible dose of radiation that alarms the haz-mat teams' monitors spells doom. The civil defense instruments appropriate to a war environment were discarded and not replaced.

It was a long time before the FBI was permitted to use the word "terrorism," though everyone knew was involved in San Bernardino. We are crippled by political correctness—thank you, Mr. Trump, for saying so. The President won't even name the enemy. We surely need to vet refugees—but even more so the State Department, the Department of Justice, and law enforcement agencies, for believers in jihad; connections with foreign governments; or bribe-takers from the drug trade, organized crime, crony capitalists, or non-governmental organizations including radical environmentalists.

Americans are being indoctrinated from grade school in the culture of collective guilt instead of individual responsibility. They are supposed to be either entitled victims or guilt-ridden "oppressors." Thank you, Dr. Carson, for addressing this racial divisiveness. Endless revenge and "reparations" for the sins of great-great-great-grandfathers means endless war, both here and in the Middle East.

When Trump calls for "making America great again," it's an admission that America is no longer great. Our military, our industry, our currency are being destroyed by taxation, regulation, litigation, reckless spending—and abandonment of the virtues, morality, and faith of our Founders.

And what is our foreign policy, really? Thank you, Dr. Paul, for asking questions about creating grievances. Who is pointing out that the U.S. and Russia are fighting a war in Syria, on opposite sides, and that a Russian warplane was downed by a NATO member, possibly with a U.S.-made weapon? Exactly why does "Assad have to go," and who are we to decide? Was our government running guns to ISIS from Benghazi, Mrs. Clinton?

It is terrible that Americans can get shot at a Christmas party, but much worse will happen if we don't confront the problems beginning at the top. ●

About The Author: Dr. Orient is president of Doctors for Disaster Preparedness, advocating for protection of Americans in the event of terrorism, war, or other man-made or natural disasters. See www.ddponline.org, @d4dp, and www.physiciansforcivildefense.org.

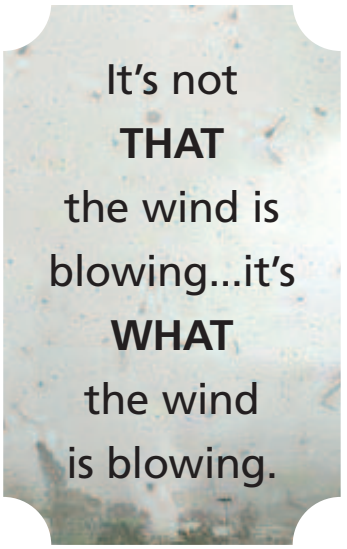
Letter to a Client:

Flat Topped Steel Shelters

By Paul Seyfried

I recently reviewed some shelter sites featuring flat-topped steel shelters. Flat-topped shelters derive no benefit from earth arching, so they can't be buried very deep ... a few feet or so. I'd get in one if a tornado was bearing down on me, and hope something heavy doesn't fall on top of my shelter, like a utility pole, semi, or farm tractor. The few feet of shielding (if not blown off during the initial blast winds, called "scouring") provide only minimal fallout protection and NO initial radiation protection.

Without exception, the pictures on flat-topped shelter sites suggest that designers do not understand the concept of radiation shielding geometry on entrances. I see vertical exits merging directly into the ceiling of the shelters, and main entrances lacking 90-degree turns and without long enough horizontal runs.



Many shelter designers use the term "military grade" on their nomenclature, but this term is meaningless. Someone please tell me what "military grade" is. Is it a launch control center at a Minute Man III field in eastern Wyoming? That would mean a 3,000 psi overpressure rated facility, with two concrete containments - one suspended on gimbals with eight feet of travel inside. These are buried 88 feet deep, and have very thick stainless steel blast doors weighing several tons. No one lists a "mil-standard" on these claims.

Flat-topped shelters are seldom if ever built to NBC shelter standards (heavily reinforced concrete shelters excepted) and should be considered to be 'storm shelters' only. Blast doors must be carefully engineered to withstand both 'over' and 'under pressures'. Many people have had very unpleasant experiences with their storm shelter doors. During last year's worst tornadoes in Oklahoma, over a dozen shelter owners reported that the sheet metal doors on their storm shelters had blown completely off. Most, thankfully, were not home or in their shelters when this occurred.

These designers don't seem to understand that it's not just wind that we're dealing with. Like Ron White, the comedian, said in his routine, "It's not THAT the wind is blowing ... it's WHAT the wind is blowing." How about a water heater hitting your door at 250 mph? Ed York (hardened facility construction advisor for NATO and good friend) made the timely comment; "A Ford station wagon, skimming the earth's surface at 600 mph is a formidable weapon" comes to mind. Ed was educating me as to why one would want to place their air intake and exhaust goose necks below grade in rock cribs instead of having them waving in the breeze. I got his point loud and clear. A shock wave pulverizes everything in its path ... buildings, trees, vehicles, utility poles, and spreads this tidal wave of ground-up 'jelly' in front of it at very high speed. This mass also aids in pulverizing more stuff along the way, and adds to the mass of debris. BUT ... it also fills in low places like basements, ditches, voids, and stairwell-type entrances with this blended crap once the overpressure drops below about 7 psi. Above that, the wind is sucking out basements ... people, too. Anything sticking above grade is going to sustain some degree of damage, and that's why Ed York greatly favored a flat, horizontal steel hatch instead of a vertical door. It's a low-drag target. A vertical door must be seven times stronger to resist a 100-psi overpressure wave due to reflected overpressure (not to mention the debris that arrives with it).

Flat topped steel shelters may have been properly engineered to carry the small, static, 'dead load' for a minimal dirt cover, but no consideration has been given to the dynamic, 'live load' from impact and ground displacement during a blast, or for proper shielding loads. Some shelter designers (right on their web sites) claim their flat-topped shelters to be even stronger than arched shelters! I know of no professional engineer that would agree with that statement. The arch (or cylinder) provides the strongest geometry for weight bearing and is a pure compression form. Arches appeared in architecture as early as the 2nd millennium BC and some have survived for many thousands of years, bearing witness to the strength of that concept. ●

HOW TO SURVIVE A BOMBING

By Colonel Jim Smith
MSS, CLEE, CPC, NRP, FABCHS

Although the probability of involvement in a bombing is low, about **70-100** people are killed annually in the US according to open records published by the FBI. This is about the same number killed by lightning. However, a few simple steps can prepare one mentally for such an event and several small pieces of equipment can prove lifesaving.

The acronym for surviving a bombing is the "Five E's."

- **Escape** the structure or area of the explosion, upwind if possible.
- **Equipment** - Use a smoke mask, N99 respirator, or flashlight if needed.
- **Evade** any attackers outside the structure/scene and avoid crowds.
- **Evacuate** - Leave the area while avoiding crowds, stay from under glass.
- **Evaluate** any potential injuries and obtain medical care if needed.

Any penetrating injuries need assesment, as they may be a deep wound, not detected from a small surface entry wound.

Bombs or IEDs kill and injure directly or indirectly using several methods. Four types of injuries result. Those with primary injuries are caused from the shock wave, sometimes known as a blast wave. This is a transonic wave coming from high explosives. Low explosives do not produce a transonic shockwave. This wave affects hollow organs such as the ears, lungs, and gastrointestinal tract. Injuries to these organs can be catastrophic. This is a short-range phenomenon. Ruptured eardrums with blood draining may be a sign the person has been exposed to a dangerous shockwave but by itself is not definitive. Those down from this type injury are usually dead or have fatal injuries.

Bombs and IEDs may be used to disperse chemical, biological, and radioactive materials. Their discussion is outside the scope of this article and such events are not common in the US.

Another primary injury, which is a short-range phenomenon, is the thermal event. Commercial explosives such as dynamite, smokeless gunpowder, and flash powder are usually over oxidized and produce gray to white smoke with little thermal event. Military explosives with RDX tend to under oxidize and produce a large thermal event with dark smoke. Burns are common for those close to the center of the explosion who survive the shock wave.

Secondary injuries occur when fragmentation from the bomb or IED strike the person. These injuries can be catastrophic and occur from some distance away. The factor to remember is some of the fragments may have velocities greater than 7,000 feet per second, which is seven times faster than the typical pistol bullet. Injuries out to 1,500 feet are possible.

Tertiary injuries are caused when the shock wave knocks the person down and they impact environmental surfaces. These injuries are typically blunt force injuries to the head and chest.

Quaternary injuries occur from items falling onto the person or objects picked up by the shock wave and propelled into the person. These include the deadly injuries produced by falling or propelled glass and crush injuries from collapse of structures.

Prevention is the best survival mechanism. Stay out of crowds and high profile events. Stay away from glass and do not stand under glass windows. Examples of recent bombings of this type targeting crowds include the Centennial Park bombing during the Olympics and the Boston Marathon bombing.

Other common modes of bombing include package or parcel bombs. One should not ever open a suspect package. This is a package or item, which is not expected, or a package one cannot confirm has been sent by the sender listed on the return address. Do not move or handle items that appear out of place. Several police officers have been killed inspecting or moving suspect packages.

If involved in an explosion while inside a structure, seek a way out of the structure or if outside, seek an escape path. This means situational awareness is essential. Knowing where the two closest exits are is important. A good flashlight and smoke mask or N99 mask are essential. Bombings produce tremendous amounts of smoke and dust. Look for suspicious people who may be targeting those fleeing with firearms. Consider secondary devices and scan your immediate area for suspect or out of place packages or items. If feasible, following a bombing, stay out of crowds. Remove clothing and shower as soon as feasible. Explosives are toxic and they release toxic combustion products. Further, the dust and debris from explosions contain toxic materials that might include asbestos from older buildings.

Prompt treatment of open wounds is essential, as they need irrigation and debridement because of the dirty environment of an explosion. Any penetrating injuries need assessment, as they may be a deep wound not detected from a small surface entry wound. Glass is difficult to x-ray making penetrating injuries the glass causes easily overlooked.

Effects of blast overpressure from shockwaves (psig – pounds per square inch above atmospheric pressure)

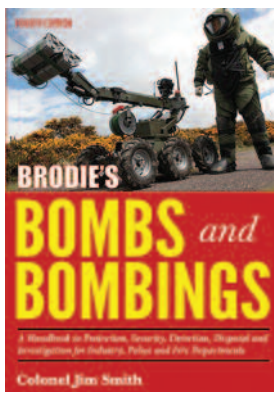
- 0.5 to 1.0 psig window glass is broken
- >1.0 psig people are taken off their feet and pushed down
- 1.0 to 2.0 psig structures with wood siding are damaged
- >2.0 to 3.0 psig cinder block walls with no reinforcement collapse
- >5.0 psig causes eardrum rupture
- >15 psig lung injuries begin
- >35 psig fatal injuries begin
- >50 psig LD50 (50% of those exposed are killed)
- >65 psig LD99 (99% of those exposed die)

Injuries producing shortness of breath indicate pneumothorax or tension pneumothorax; both of these conditions require rapid surgical intervention with needle decompression or a chest tube insertion. Gastrointestinal injuries may not become apparent for several hours fol-

lowing injury. Pain and spasm of the abdomen are the usual presenting signs. Remember shockwave injuries may not have any external signs.

The key to surviving a bombing is prevention. However, should one become involved in such an event, know how to evacuate, look for additional attackers or other IEDs. A smoke mask or N99 respirator is important as is a good flashlight. Injuries incurred during such an event will need medical follow up. Those with bleeding from the ears need medical assessment and observation for at least eight hours. Mental preparation and mental rehearsals of escape are needed prior to the event occurring. ●

About The Author: *Jim Smith is the author of "Bombs and Bombings and A Police and Security Officers' Guide to Responding to Bomb Threats," published by the Charles C. Thomas Company. He is a graduate of the University of Southern California with a master's degree in safety. Smith is the public safety director for his community in south Alabama and public safety coordinator for a large university. He has been a police officer, firefighter, and paramedic for more than 40 years, has supervised a tactical team, a bomb squad, a SAR team, a WMD response team, and clandestine lab assessment and entry team. Smith is an instructor for Troy University and University of Phoenix teaching homeland security and terrorism related courses. Smith conducted explosives engineering research published in international journals regarding blast and fragment mitigation and has testified as an expert witness regarding explosive devices. His research has led to the issuance of two patents for a proprietary explosive device and blast mitigation equipment.*



THE REAL RISKS OF FIRE *Continued from page 5*

In order to corroborate the findings of several other studies, I conducted some testing on available fire alarms from three different manufacturers. Two ionizing smoke detectors and one combination ionizing smoke detector and CO detector were subjected to some informal testing. Fires with various fuels such as wood, particle board, carpet, and electrical cords with vinyl insulation were established in a portable fire pit about 30 inches in diameter. All three detectors were placed in the smoke plume about 36" above the fire for a period of up to two minutes. The results varied but there were several instances where the detectors failed to trigger when placed directly in the smoke plumes. Even the newest smoke and CO detector failed to trigger after a full two minutes in the electrical cord fire that had the most noticeable black smoke. All of the detectors triggered in at least some of the tests after being in the smoke for only 10 seconds which added some validity to the test method, but the findings confirmed that the results were varied and the smoke detectors were not entirely reliable.

> *"The most disturbing information about the common smoke detectors in most homes is that they do not work in a timely fashion in many actual fires."*

There are optical smoke detectors on the market today that are substantially more reliable than the ionizing smoke detectors in most homes. They have been manufactured since the 1970's and there has never been a fatality from a fire where they have been employed. Applied Fire Technologies of Coppell, Texas manufactures a line of smoke, carbon monoxide, and heat sensors that network together so that every alarm on the local network sounds when one alarm is triggered, thus alerting everywhere in the home. The units have permanent batteries that last for up to 20 years and they run internal diagnostics continuously to ensure that they are operating correctly. They are normally installed by a company representative after an on-site review of each home. You can contact the company and find your local dealer by going to www.crossfire-alarms.com and going to the "contact us" tab.

Fire extinguishers can be very useful once you have been alerted to a fire but they must be kept in good working order. They are normally fitted with a pressure gauge but they should also be checked to ensure that the powdered fire retardant material has not solidified. The condition of the fire retardant can be checked by testing the weight balance when the fire extinguisher is gently turned on the side and most of the retardant should be at the bottom. Then the extinguisher can be pushed on its side from a vertical position on a soft carpeted surface. If the horizontal weight balance changes substantially after the "fall" on its side then it can be assumed that the retardant is still loose inside and the fire extinguisher has a high probability of working appropriately when required.

Summary

The images we see on television and in the movies with bright flames of a house on fire with people moving around inside the house and trying to rescue someone are very misleading. Most actual house fires create an environment with thick smoke so that you cannot see anything and acrid and toxic smoke, where an individual cannot maintain consciousness for more than a few seconds. We need to prepare to survive by minimizing the risk of a fire starting with installing the appropriate alarm equipment in place to ensure that we can escape during the early stages while it is possible. ●

Charging Shelter Batteries with GRID POWER

By Paul Seyfried & Sharon Packer
www.utahsheltersystems.com

In the distant past, we have sometimes recommended installing a patch cord from the shelter to grid power, which was to be used once a month, to charge batteries, and then unplugged after the batteries were fully charged. However, we soon found that it was too easy for our clients to forget to do this regular maintenance and then a month turned into two years and their batteries were ruined. We no longer make this recommendation. We see no reason to ever connect a shelter to the power grid. Grid power will also collect EMP and introduce it right into the shelter.

An outside solar panel will keep batteries charged at 100%, eliminating the need to remember this monthly maintenance chore. This also decouples the shelter from a huge EMP collector (the grid). Most quality charge controllers and inverters have built-in protection against surges, and can handle a 3,000 volt spike.....exposed wiring collects, at most, 50 volts per foot. Ten feet of exposed 12 gauge conductor might collect 500 volts. One can also add Midnight Solar Lightning Surge suppressors (https://ironedison.com/midnite-solar-lightning-arrestor) to your shelter's electrical system to help assure component safety. (Clamp times on the suppressors is less than one millionth of a second- how much less is open to speculation, but will limit the surge to 900 volts and will definitely stop E2 and E3 components of EMP, but may just be effective against E1, as well.) Lightning remains a threat to your shelter's electrical system too and the suppressors will provide protection from powerful electrical fields set up by a nearby strike—but not direct hits.

We shield most of the solar panel wiring in conduit and weatherized aluminum or steel flex. Only a few feet of conductor is exposed. It is remotely possible, however, that the peak surge could exceed this voltage threshold and destroy the charge controllers and inverters. We suggest the placement of a redundant set of charge controllers and inverters inside a faraday cage, within the shelter.

Solar panels are an easy target and could be vandalized, stolen, or damaged by weapons effects. We recommend that you place only one, sacrificial solar panel outside the shelter. While one 40-watt panel can keep ten, 6-volt batteries (wired for 12 volt service) fully charged while the shelter is not in use, there is no penalty for having a larger panel or panels. Just have spares. Keep all additional solar panels safely inside the shelter where they can be accessed for later use. Have a small generator, such as a Honda EU2000i, stored in your shelter for a backup charging system. Exercise your shelter batteries and get to know how well your solar capability performs with shelter operation. It's best to find out if you need additional solar capability now, before the supply chain is disrupted. ●

ROLLING UP THE ISIS TACTICAL USE OF SOCIAL MEDIA

By Bruce Curley
TACDA Board Member

Problem

ISIS uses social media tools to take territory, gain power, spread its influence, recruit new fighters, advance its propaganda, and create a myth that it is indomitable. They film their butchery using professional film crews and hundreds of thousands of cell phones. They upload these videos by the thousands to intimidate their enemies into submission. But their social media weapons can be taken out if we have the will and unleash our experts to do so.

ISIS Social Media Crusade

ISIS almost immediately uploads their videos to social media when slitting the throats of captives, selling conquered people as slaves, throwing homosexuals off buildings, engaging in battlefield slaughters, shooting prisoners, and conducting victory parades.

They continuously celebrate their depraved lifestyle, ideology, tactics and beliefs on Facebook, Twitter, YouTube, Instagram and other social media. And when some social media companies take down their excesses, ISIS quickly regroups and posts it on other social media outlets. Their social media jihad is relentless and operates 365 days a year, 24 hours a day.

The leaders of ISIS know we live in a socially connected culture and they use it daily to advance their ends. More importantly, they know that a single Tweet generates little action, but a Tweet and a post on Facebook, Twitter, YouTube and Instagram increases the circulation, and influence of a single Tweet, exponentially.

In 2007, the blogger, Robert Scoble, identified the social media *Starfish* as a visual way of representing what ISIS does every minute in the Internet: Use various branches of social media to convert the vulnerable to believe their propaganda.

The critical concept in this *Starfish* diagram is "conversions." Used correctly, a company with a product, a politician with a cause, and now a jihadi with a fanatical ideology can convert others into willing believers.

ISIS leaders know that social media enables them to share larger, deeper, and more extensive relationships. It is why they draw converts from over 70 countries to their expanding caliphate.

Social media tools are so ubiquitous we forget how powerful they are. Mostly, they are fun which is why they are so popular. They create a social story … a human story … not a technology story.

When used together in a *Starfish* strategy, intelligence services in the West can develop relationships with others to increase trust. ISIS uses this tactic successfully. Our intelligence services were very good at doing this during the Cold War. With the correct use of social media, we can convert social media relationships to help fight the scourge of ISIS.

With social media tools we can create, collaborate and share information with others. To compete successfully against ISIS, we must use these social media tools to our advantage to contact, convince, and befriend others through a relationship.

We can use them, as ISIS does, as a force multiplier. Social media aggregator tools like Google+, Instagram and Twitter can be used to potentially defeat ISIS.

These social media tools are more powerful by a factor of millions when used together than when used alone. ISIS and other radical Islamic terrorist organizations know this.

As a force multiplier, ISIS perpetually uploads its combat and recruitment films to Facebook, YouTube, Twitter, Instagram, and other social media platforms and reaches hundreds of millions of viewers. They must be stopped.

We need to act on this as well.

Terrorists Use of Social Media in an Operational Attack

During terrorist operations, they have demonstrated a professional grasp of messaging and messaging tools. They understand that the optics, as captured in social media, is as important to their victory as any military objectives they achieve on the battlefield.

They have used the mainstream media, often unfiltered, as an adjunct force multiplier to increase their power. They are very good at the social media war.

Their attack on the Lindt store in Australia is a good example. For unlike decades of practice in prior attacks, the terrorists at the Lindt store in Australia allowed their hostages to keep their cell phones.

Then they ordered some hostages to call news stations to try to get on the air live. Why the change in tactics? Because now they have seen how ISIS has mastered the tactical advantage of manipulating social media to broadcast their ideology.

WWII Social Media Redux

This is not the first time we have faced a social media challenge from a murderous organization bent on world domination. When I was a student at the American College (now University) in Paris, France in 1975, I used to go to Nanterre University to research original sources (films, posters, newspapers) to write a paper for a political science class on Joseph Goebbels and the Nazi Propaganda Ministry.

I saw remarkable propaganda films Goebbels created in the 1930s and 1940s in their original versions. Watching those films for many hours on Saturdays, I knew immediately that there is no question that, like the ISIS propaganda ministry, Goebbels and the Nazi Propaganda Ministry understood the impact of film and radio, the social media tools of his time, for changing the opinions and feelings of people worldwide. As with ISIS, they used that knowledge, ultimately, to bring about massive death and destruction.

But as good as Joseph Goebbels was at using the social media tools of his time to conquer tens of millions, he never had Facebook, Twitter, Instagram, Google+, Twitter and the other social media tools ISIS has appropriated and uses so successfully to spread its ideology through visual depictions of its hyper-violence.

The fight against ISIS will take place on many fronts. The social media front is one we created and mostly dominate. There is no reason we cannot win this one. All we need to do is to unleash our social media professionals and companies. Even if we are already several years late to the fight, working together with our intelligence professionals, we can roll back the ISIS and other terrorist organization's cyberspace battlefield wins. ●

Text message from Marcia Mikhael:

"Dear friends and family I'm at the Lindt Cafe at Martin Place being held hostage by a member of the ISI. The man who is keeping us hostage has asked for small and simple requests and none have been met.
He is now threatening to start killing us. We need help right now. The man wants the world to know that Australia is under attack by the Islamic State.
The demands are:
1. Send an IS flag into the cafe and someone will be released.
2. To speak with tony Abbott via live broadcast and 5 people will be released.
3. Media to tell the other 2 brothers not to explode the bomb. There are 2 more bombs in the city."

TACTICAL MEDICINE ESSENTIALS

All photos by Dr. John Wipfler

Officer applies a tourniquet to his leg after being shot.

WHAT YOU NEED TO KNOW TO SURVIVE

By Colonel Jim Smith, MSS, CLEE, CPC, NRP, FABCHS

The problem with tactical medicine is that most individuals treat these emergencies with the common methods used for "routine emergencies." In reality, these emergencies are far different and require a different mindset and tactics than those in a hostile setting. Blood loss is the frequent killer, followed by respiratory compromise from penetrating injuries.

The acronym **"Call-A-CAB-N-Go-Hot"** stands for the basics of tactical medicine. When an emergency occurs, which will likely be a gunshot wound, the natural reaction is to rush to the aid of the person injured. This places the rescuer in the kill zone. The correct response is to **Call out the threat** and that a person is down, and seek hard cover. The suggested wait time is at least 30 seconds while one tries to identify and **Abolish the threat,** which is the **A** in the acronym.

Once the patient is accessed, the reverse order of patient assessment is called for to reduce life threats. The **C** is for **Compress killer bleeds.** This may be gloved hand pressure on a dressing or application of a battle dressing such as the Olaes® that allows compression and focal pressure with a plastic cup. If needed a tourniquet should be applied to control bleeding from extremities. The application should be practiced as a buddy aid and self-application. The ability to apply with only one hand is essential as one upper extremity may be injured. For law enforcement self-aid is critical as the downed officer may be in a location where he or she is not accessible. The SOF®-T or CAT are both adequate for the job. The tourniquet should be applied until the bleeding stops and usually at least one more turn made on the tourniquet. The application is very painful and some individuals have stated the tourniquet application caused more pain than the gunshot wound.

The next **A** is for **airway.** The traditional airway check is required. One has to ascertain that the airway is open and clear. The head tilt, chin lift method is recommended unless the potential for neck injury is present. In this case, the jaw thrust maneuver is recommended. If needed, an oral airway can be inserted if no gag reflex is present. Placing the person in the recovery position, if no spine injuries are suspected, may be needed if the patient cannot be attended constantly.

The **B** is for **breathing.** The tradi-

Police Tactical Medic applies tourniquet to child's arm in a school shooting.

Close up of photograph.

tional assessment for breathing is adequate. Respirations should be with the 12-20 range, full and deep. Those below 12 or above 20 may indicate respiratory compromise. Most sources recommend ventilation via bag valve mask if respirations are nine or below, or at any point in which ventilation is not sufficient. Rapid rates may indicate developing tension pneumothorax or hemothorax.

The average young person will tolerate a pneumothorax well. The side with the injury should be rolled down if no spine injuries are suspected. Some remember this by the statement "bullets go down." Some patients will prefer to sit upright which allows better chest expansion. Any bleeding into the lungs will pool at the bottom of the lungs and impair less surface area while in the seated position. Hemoptysis, coughing blood up, is a sign of lung injury. If the shortness of breath following chest trauma is rapid, suspect a tension pneumothorax. Delayed shortness of breath is likely form hemothorax.

The treatment of tension pneumothorax involves insertion of a large bore needle in the chest to decompress the tension. The buildup of air in the chest outside the lung compresses the lungs and heart and can be rapidly fatal if not relieved. A simple open pneumothorax can be covered with an airtight dressing of plastic. Commercial chest seals such as the ACS™ Asherman chest seal can be applied. It allows outward airflow but no inward airflow. This seal restores the chest wall integrity and aids in respiration. If such is not available, a simple plastic covering taped on three sides can work or brief removal of the airtight dressing if respiration becomes labored.

The **N** is the acronym for **Neurological assessment.** If the injured person has a mechanism of injury consistent with spine injury, one must assess such. The assessment of motor and sensation at the fingers and toes is suggested. In exigent circumstances, it may not be feasible to protect the spine fully. A clothes drag can be required to move the person irrespective of potential spine injury. If feasible, protect the neck with a rigid cervical collar and place the injured person on a spine board for transport.

The **Go** is for **rapid transport** out of the danger area and to definitive medical care. Delays should be minimized with the goal to reach the hospital in no more than one hour.

Hot means **watch for hypothermia.** Those with serious injuries and blood loss can be candidates for hypothermia. This is especially true in cold environments. Prevent body heat loss, remove wet clothing when feasible, and rewarm if feasible. The use of thermal emergency blankets or a sleeping bag may be needed.

In summary:
Call-A-CAB-N-Go-Hot
Call out the circumstances and that a person is down, seek hard cover
Abolish the threat
Compress killer bleeds with a battle dressing or tourniquet
Airway, make certain the airway is open and patent
Breathing, make certain the person is breathing adequately
Neurological examination, a brief check to determine if spine injuries are present
Go to the hospital or advanced care location
Hot, check for and prevent hypothermia ●

About The Author: *Jim Smith is one of the authors of Tactical Medicine Essentials, a text endorsed by the American College of Emergency Physicians. He is a graduate of the University of Southern California with master's degree in safety. Smith is the public safety director for community in south Alabama and public safety coordinator for a large university. He has been a police officer, firefighter, and paramedic for more than 40 years, has served, and supervised a tactical team, a bomb squad, a SAR team, a WMD response team, and clandestine lab assessment and entry team. Smith is an instructor for Troy University and University of Phoenix teaching homeland security and terrorism related courses.*

Building Your Rainy Day

FOOD STORAGE

Fund

By Debbie Kent

Food and water are key to our survival. The chaotic state of the world and/or personal tragedy is going to affect you and your family eventually. I don't want my family to go to bed hungry, nor my extended family, friends or even my slightly eccentric neighbor down the street. That is why I invest so much of my time and energy teaching how to correctly store and use food storage.

The concept of the perfect pre-packaged food storage is not realistic. The actual amount of food is a bit deceiving and you may be lulled into thinking you are ready. In reality, it is not nearly enough to see you through the advertised time period in spite of the inflated price tag. You can build your food storage for a fraction of the cost and tailor it to your unique dietary requirements and taste. The beauty of my designer plan is that there will be little or no waste and it costs a mere fraction of commercially packaged plans.

Short-term food storage, or "rainy day" foods is the best way to build your food storage. Shelf-stable pantry staples, garden produce, frozen and refrigerated foods comprise this rainy day security. Your "rainy day" foods include 90 days of delicious meals that you use every day, including during life's emergencies. Those emergencies come in many forms: job loss, family sickness, new baby, busy days or other personal emergencies. Planning ahead allows you to prepare the meals your family enjoys while taking advantage of money-saving stock up sales. Cooking at home becomes faster than take out because you have all the ingredients on hand all the time. One of the advantages of "rainy day" meals is that you have the ability to mix and match: fresh produce (from the store or garden), frozen or shelf stable ingredients. I am a big fan of these types of meals due to these advantages.

- Prepared by anyone
- Fast and easy to put together
- Easy to rotate
- Shelf stable (or frozen) ingredients for extending storage life
- Locally purchased
- Control over the ingredients

Rainy day foods can include: pre-packaged mixes, frozen or canned meals, homemade dishes such as a casseroles (make two: eat one, freeze the other) or a transformed favorite recipe that is a shelf stable, just add water meal. This is one of my favorite soup recipes that I have converted into a shelf stable instant meal. I layer the ingredients in a jar and store in the pantry. All I need to turn it into a delightful meal is heat, water and a little time. Give it a try, you will *love it*.

About The Author: *Debbie Kent has taught cooking with food storage and preparedness seminars in Southern California, Idaho, Arizona and across Utah where she shares her knowledge of the good, the bad and the sometimes funny truths in the world of preparedness, delighting her audiences with her easy going and enthusiastic "can do" approach.*

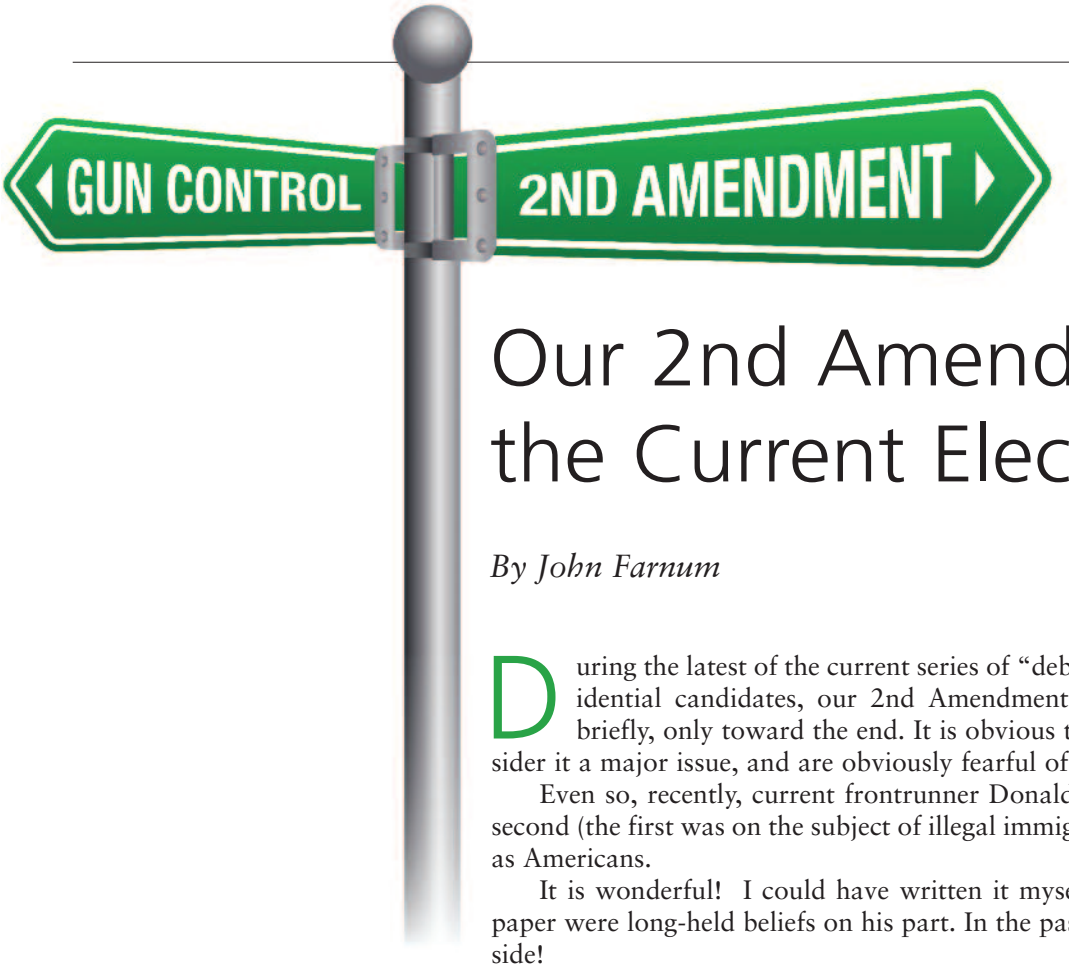
ZUPPA TUSCANA SOUP

1 ½ c dehydrated diced potatoes
½ c potato flakes
1 T cornstarch
1/3 c non-instant dry milk
1 T dried minced garlic or garlic powder
3 T dry chicken bouillon
¼ c dried minced onion
1/2 t red pepper flakes (to taste)
1-2 c freeze-dried Italian sausage pieces (spicy or regular)
2 large leaves kale, dried in microwave.
(See video on www.storethisnotthat.com)

Mix all ingredients (except kale) with 10 cups of water. Bring to a boil and turn heat off. Allow soup to sit, covered, for 30 minutes. Add in kale and return to a boil. Allow soup to simmer for 10 more minutes. Then enjoy!

Using foods from your freezer and pantry feeds you now, but storing enough for three months will insure your family will stand strong through life's little storms and give you a big jump on meals that will keep your belly full when disaster strikes.

Try some of my delicious recipes in "Store This, Not That!" or visit www.storethisnotthat.com.



Our 2nd Amendment and the Current Election Season

By John Farnum

During the latest of the current series of "debates" among aspiring Republican presidential candidates, our 2nd Amendment Rights entered the discussion, albeit briefly, only toward the end. It is obvious that neither CNN, nor Fox News, consider it a major issue, and are obviously fearful of it being discussed openly.

Even so, recently, current frontrunner Donald Trump released a "policy paper," his second (the first was on the subject of illegal immigration) on our 2nd Amendment Rights as Americans.

It is wonderful! I could have written it myself! I only wish what he stated in the paper were long-held beliefs on his part. In the past, he has not been so stridently on our side!

Sadly, even Democrats give hollow, cynical, mendacious lip-service to the 2nd Amendment, at least while they are campaigning, then, of course, openly advocate for universal, forced gun-confiscation once in office!

So, while perfunctory lip-service to the 2nd Amendment, at least to some degree, seems to be "expected" of virtually all candidates (even Bernie Sanders describes himself as "pro-hunting!"), strong, non-ambiguous language, like Trump's, doesn't leave much to the imagination, and is surely good to hear.

I hope we hear something similar from other Republicans, instead of typical weasel-words and weasel-phrases that are designed to sound ponderous and profound, but that ultimately guarantee nothing.

Example, "... and I just don't want guns to fall into the wrong hands..."

When you hear that, you can be sure the "wrong hands" he is talking about are *your* hands, and the hands of every other of his detractors and non-supporters!

Weasel-phrases like that are what we typically hear from Democrats, and we are, right on schedule, starting to hear it already!

I won't be using this forum to endorse presidential candidates, and I, personally, will be voting a secret ballot. I will complement and criticize as I see fit, without regard to political party.

No candidate is perfect, but we, what few of the legitimate electorate remain, need to hold their feet to the fire and insist that they talk, in plain English, about our rights as American Citizens.

For one, I can't abide weasels and the meany-mouthed!

Donald Trump, for all his faults, has set a good example. I wonder what all the others, CNN, and Fox News are waiting for?

"The only thing in this world more boring than someone who won't come to the point, is someone who keeps talking after he has made his point!" ●

Disclaimer: *The views and opinions expressed in this article are those of the author and do not necessarily reflect the official policy or position of The American Civil Defense.*

Don't Forget the Gloves!

By Kylene Anne Jones

Are a variety of gloves on your list of basic preps? They should be. No one glove can provide the protection you need for every task. Have you ever had a small paper cut on a finger that was really painful? Even small cuts and scrapes can become life-threatening if not cared for properly.

In a disaster scenario, gloves become like gold. Healthy hands are critical for performing many necessary tasks. The added protection of the right pair of gloves protects hands from blisters, injury and even frostbite. Some gloves serve as a protective barrier and can prevent the spread of disease.

I have several types of gloves that I have chosen to stockpile for our family. Each has a unique job and I would hate to be without them. Your list may be different, but this is what works best for us.

Disposable exam gloves (small, medium, and large). These gloves fit well and are designed for performing small intricate tasks. They provide a protective barrier against contamination. We reserve these gloves for cleaning wounds, protection from toxic substances or glues, and when planting tiny seeds in the garden. I stock a variety of sizes that fit each member of our family. Keep a few protected in a Ziploc bag in each first aid kit.

Sterile gloves are more expensive than exam gloves so we only stock a few. These gloves would be used only during a sterile procedure to prevent infection.

Vinyl disposable gloves for everyday tasks such as cleaning, bottling or anytime I need to protect my hands. In this photo, I needed to run out and dig some carrots in early March for dinner. It only took a second to slip on a pair of these gloves and I came back in with clean hands. I love them. They are one size fits all, but for most daily tasks they work fine. They are much less expensive than exam gloves.

Nitrile coated gloves are my favorite work gloves. They are only about a dollar each when purchased in a ten pack. They made it to the top of my list because of price and functionality. When they get wet they still breathe and quickly dry out. They can be tossed in the washing machine to clean. One pair will last for a few months of my intensive abuse. Once I tried these, I tossed all of my old canvas and fabric gardening gloves. They perform better, wash up nicely and are less expensive.

Leather gloves provide the maximum amount of protection for your hands. They are my husband Jonathan's glove of choice. Good leather gloves are quite expensive but worth the price. He always keeps a pair in each of the vehicles for emergencies.

Winter gloves in our climate are indispensable. At the end of every season when the winter gloves and hats go on clearance, I stock up again. We keep a set of winter gloves and hats in each survival kit and one for every passenger in each vehicle. A good pair of warm gloves can help prevent frostbite and keep you much more comfortable in cold weather.

Don't underestimate the protection of the right pair of gloves. Some things are easy to manufacture at home. Gloves are not one of those items. I suggest realistically evaluating your supply of gloves and stocking up on the ones that you might need while they are available and relatively inexpensive.

Kylene and Jonathan Jones are the authors of The Provident Prepper—A Common-Sense Guide to Preparing for Emergencies.

Visit them online at www.TheProvidentPrepper.org and www.YourFamilyArk.org.

Water From Thin Air

By Jay Whimpey, P.E.
TACDA Board Member

It occurred to me that dehumidifiers take water directly from the air and condense it into a storage tank integral to the unit.

I recently installed 1000 watts of photovoltaic generating capacity and started considering what could be done with that much energy in a grid down situation. One need that tops the list is clean drinking water in any emergency situation. It occurred to me that dehumidifiers take water directly from the air and condense it into a storage tank integral to the unit. I started shopping at distressed freight and second hand stores and found a suitable dehumidifier for under $50. They normally sell for over $150.

The unit was tested by leaving it outside and setting the unit on "continuous operation" until the storage tank was full. This particular unit had a sight glass on the outside of the storage tank to show the current level of water in the tank and an automatic shut off switch when the tank reached maximum capacity. A "Kill-A-Watt" meter was placed on the power cord to the unit to determine the peak power and overall power usage during testing.

The dehumidifier collected six gallons of water in roughly two days of continuous operation. The weather was about 70 F average with relative humidity in the 50% range during the testing. The unit used 5000 watt-hours during that time period with a peak power usage of 550 watts, similar to what a full-size refrigerator would use. The water produced was consumed with no additional treatment and had a good taste. It is basically distilled water so the water could also be used to replenish the water in batteries that require very pure water.

Overall, the testing showed that a dehumidifier could be an asset during a grid down situation by producing good drinking water with a relatively modest amount of power compared to a reasonably sized solar power system. In this case, the dehumidifier would use less than half of the power produced by the 1000-watt photovoltaic system, especially in the summer when the days are longer and much more power is available. Personal water consumption would normally be higher during the summer months. The unit would have to be operated inside when temperatures are below freezing to prevent damage to the unit. I hope this gives you some good ideas to consider. Keep preparing!

Everywhere and Not a Grain to Eat!

Or Overcoming Gluten Intolerance

By Kyle Christensen, DC, ND, MH

So you've been dutifully prepping and have amassed a nice stash of wheat, only to discover that you or a family member has become gluten intolerant. So now what?!

The problem of Gluten Intolerance and Celiac Disease is growing exponentially. And as a result, the gluten-free market is booming. Doctors, celebrities and the mom with kids next door are disavowing grains while preaching its evils with religious fervor. If you hint or suggest that wheat may not be quite the villain portrayed in the media, you can bring upon yourself quick and harsh judgment.

As you settle into the world of gluten intolerance, you discover that this growing problem has made wheat more of a foe than a friend. Way back in the early 1980's when I was in chiropractic college, we were never taught about this exponentially growing malady known today as Gluten Intolerance. Of course we studied Celiac Disease–as a genetic inability to breakdown or digest gluten, but that was rare–afflicting maybe one third of a percent of the population.

Understand that gluten intolerance is real and it is growing and afflicting more and more of us. But also understand that the vast majority suffering from gluten intolerance do not have the genetic disorder known as Celiac Disease. It seems that many patients are more satisfied with a disease title than just being intolerant of something. Doctors are giving them what they want, a diagnostic title that for many gives them an out or excuse from personal responsibility. So now many wear the badge of Celiac Disease, assured it is no fault of their own. You see, there are two rules of thought regarding disease. The first (and more ascribed to) is that disease or illness descends upon the innocent and unsuspecting and gets you. The other is that there is a rational cause–usually the result of lifestyle choices. It is my opinion that gluten intolerance stems from the latter of these.

As is so common in our culture, we are so quick to come to conclusions and often not even asking the right questions to the issue at hand. The first question that should always be asked is *why*? Or what the heck is going on here?! Even the most ardent foe of grains today must admit that the issue of gluten intolerance did not exist in past decades like it does today. So, in my thinking, we must ask: What is going on here?

I am not questioning the reality that people suffer and indeed suffer greatly from eating wheat or other grains that contain gluten. What I am suggesting is that there is more to the picture of gluten intolerance than simply wheat (or rye or barley) being bad. Certainly, there is an individual genetic component in some people, but that is not the only factor to consider. GMO's, while not a good thing, were not around (as far as wheat) when the gluten intolerance crisis began. Modern hybrids are also blamed, but even the ancient grains have gluten (as well as gliadin and glutenin which are contributing factors). The wheat is not so much the problem as the way it is prepared.

Modern methods of food manufacturing have changed the way grains are prepared as compared to the way they have been prepared over the past millennia. Your typical manufacturer is interested primarily in profits. To insure profitability, they focus on getting the product out as quickly and economically (for them) as possible. They are also interested in shelf life of the product once it gets to market. There are other factors, of course, but these are the main two that have effected the digestibility of your bread.

Bread in times past, was not made with quick rising yeast. In fact, Fleishman's introduced rapid rise yeast in 1984. Which coincides with the advent gluten intolerance. Being able to use a yeast which would allow bakers to make twice the amount of bread in half the time was just too good to be true. It seems, as we will discuss later, that there is more to the rising processes than just rising. Bread and grains, in times past, were not laden with preservatives and chemicals to lengthen the shelf life, to enhance the texture, color or whatever else they do to increase sales. Modern convenience dictates that we don't make "daily bread", but we buy our bread once a week and expect it to stay fresh (and not mold, ever!).

Grains, as well as legumes, nuts and seeds, naturally contain chemicals known as anti-nutrients. The purpose of these anti-nutrients (such as phytates, enzyme inhibitors, saponins) that are genetically built into many plants, are there to insure their grains survival. If, for example, cattle begin to eat too much of a bean or grain growing in the field, the antinutrients cause a mild digestive irritation prompting the cow to move on to something else. Without these anti-nutrients, the tasty grain or bean would be entirely consumed and its survival could be in jeopardy.

Additionally, phytic acid acts as a protective coating (kind of like cellophane) on the grain, nut, or seed which prevents germination. This is why we can store wheat and plant it successfully many years later. In some cases, such as with Kamut, thousands of years later. It turns out that it takes at least six to eight hours for this protective phytic acid shealth to dissolve or break down once exposed to moisture. Which is why we water or soak our seeds before planting them.

Ancient man was pretty clever. Through trial and error (and without refrigeration), they discovered ways to preserve seeds as well as make their food more digestible and more nutritious.

"The wheat is not so much the problem as the way it is prepared."

If we ask the question, "What are we doing to the grains we eat today that people back in the day did differently?", the answers can be found. We know as an historical fact that people have been eating bread and grains for thousands of years without it causing problems. In

Christianity, we pray for our daily bread and Christ even refers to himself as the Bread of Life—each example having very positive connotations.

Every culture prior to ours would soak or ferment their grains and bread dough prior to cooking. Bread was not made with added yeast, but with a culture or sourdough starter (typically a strain of lactobacillus bacteria). This natural leavening was acidic and would break down the phytic acid, deactivate the enzyme inhibitors as well as cause the bread to rise. The resulting product was a fresh aromatic, easy to digest, healthy bread.

Genuine sourdough bread is made today, as it was anciently, with three primary ingredients–ground grain, water and salt. This simple combination delivers a light, nutritious loaf with exquisite taste when made properly. Traditionally, bread takes two to three days to make. Noted that the Hebrew people in their speedy exodus from Egypt were instructed to make unleavened bread—bread that didn't require the time to culture, ferment and rise.

Bread and grains (this includes pasta, pastry and anything else made from flour) which have been improperly prepared have been eaten as a dominate part of the diet. These anti-nutritents cause irritation, inflammation and deplete minerals in the digestive tract. Coupled with a genetic predisposition that many have been inherited, the result can range from mild discomfort of gluten intolerance to the ravaging inflammation of Celiac Disease.

As a result of years of eating bread and grains that are milled too finely, risen too quickly, and eaten too abundantly, chronic and sometimes disabling digestive conditions are spreading as an epidemic across modern cultures. The consequences are gluten intolerance and Celiac Disease with their attendant inflamed and damaged digestive tract.

Let me share an analogy. As we are hiking through the forest, we come across a beautiful idealic meadow. Grasses and wildflowers in abundance. A small babbling brook meanders and, of course, Bambi is skirting the perimeter, munching the wide variety of foliage. Imagine, to our dismay, a crop duster flies overhead, dumping his load of herbicide, resulting in the destruction of the grasses, flowers and wild growth. Then it begins to rain and rain. Without the healthy root structure of the plants to hold the soil intact, the rich fertile soil begins to be washed away. Over time, what was once a gloriously diverse healthy meadow has become a barren eroded waste land.

In our attempt to restore the meadow, we purchase a variety of seeds. We are smart enough to know we need a variety of species–because if we just plant Kentucky bluegrass seeds, we could end up with a lawn, not the meadow we desire. But sadly, few of the seeds take hold because of the depleted soil. Patches of growth occur, which certainly helps, but we end up with a compromised meadow. Determined to succeed, we bring in tons and tons of compost–rich fertile nutrient rich compost. Now the planted seeds take hold, sink their roots deep and, with time, even Bambi returns to our restored meadow.

Compare this now to our digestive tract. The grasses and wildflowers are the probiotics that grow in the gut and the rich soil is the lining of the intestinal tract. The herbicide that kills the growth can be antibiotics (which kill both the good and bad bacteria in the system) or chlorinated water (designed to kill pathogens to protect our water supply, but once in the body continues its sterilization). Additionally, food additives, preservatives and a vast array of chemicals can compromise the healthy complexion of our digestive tract.

Couple that with a diet that is dominated by sugar and processed foods. The wiped out probiotics, which are an important part of digestion, are not there to do their job such as converting the nutrients we eat into a form that can be used. Combine this with quickly made bread and pasta which do not have the phytic acid broken down, which results in the robbing or bind up of minerals from the lining of the intestines. What was once strong intact intestinal walls, now becomes a much looser matrix of tissue or what we would call a "Leaky Gut".

To heal the digestive tract, we must take the same approach as healing the meadow. First, we need to eliminate what is causing the problems. Next, bring in compost, for the gut it is in the form of bone broth and gelatin–providing the richly diverse minerals and nutrients to heal the connective tissue lining of the gut. Then we need seeds–wildflowers and grasses for the meadow, but for our gut, we need an equally diverse supply of probiotics. Sorry, taking only acidophilus is akin to planting only Kentucky blue grass. Then with time and eating healthy, whole natural foods–you can even begin to eat wheat again–of course, properly made with wheat in a sourdough form rather than quickly made through modern yeasts.

The solution will not be found in simply eliminating gluten from the diet (although this is necessary and it does help with the symptoms). Honestly, people suffering from gluten intolerance, even though they have completely eliminated gluten in all forms from the diet, still have digestive problems and are oh so sensitive to so many foods and are magnified by stress. Remember, the digestive tract needs to be healed.

There is hope.

Food and eating should be a wonderful experience that is discussed, planned, anticipated and savored. Unfortunately, those suffering with digestive distress too often view mealtime with anxiety, frustration and trepidation.

Processed foods, including wheat/gluten containing products (even homemade) made from rapid rise yeasts, when eaten too abundantly, act as irritants, resulting in inflammation, diminished absorption of minerals and nutrients and ultimately damage of the intestinal tissue. Compound the naturally occurring "anti-nutrients" with chemicals added by the manufacturer such as preservatives, artificial colors/flavors/enhancers, etc. and we end up with inhospitable foods. The knee jerk reaction is to eliminate all grain from the diet. Our clever ancestors learned that by soaking grains,

Food and eating should be a wonderful experience that is discussed, planned, anticipated and savored.

seeds, nuts and beans, something magical happens. Gluten is broken down, phytic acid is neutralized and enzyme inhibitors are deactivated. The inhospitable food is converted into an easily digestible, healthy and nutritious food.

Grains are not the problem. It is how they are prepared. Breads made from wheat or other gluten containing grains must be soaked or fermented with an acid (such as sourdough starter or apple cider vinegar) for a minimum of six-eight hours before proceeding to cook. An Italian study has shown that with proper sourdough fermentation of wheat, gluten counts have gone from 75,000 ppm (parts per million) down to 12 ppm. That is well below the reaction threshold, making it safe for those even with Celiac Disease. This technique was used by every indigenous culture to prepare their grain.

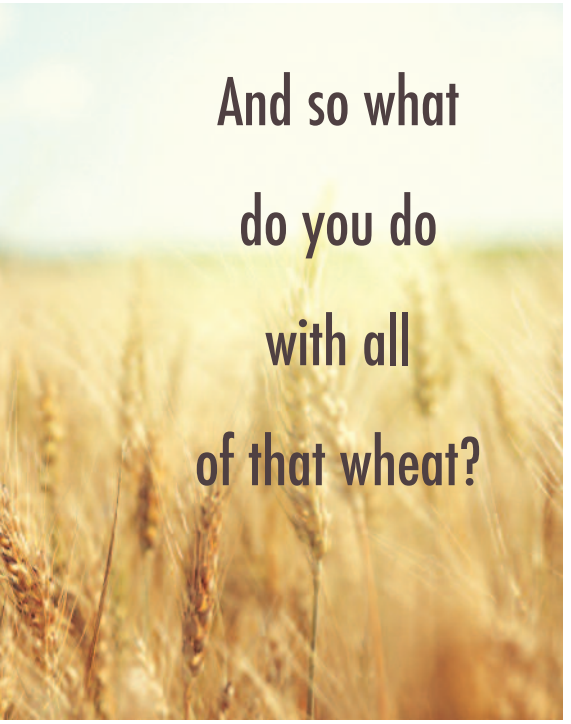
Genuine sourdough bread is not made with yeast–read the labels. I once mistakenly bought Apple Cider "flavored" vinegar. You don't want sourdough "flavored" bread as is sold in many markets. When bread is introduced back into your diet, it should be sourdough of your own making or that of a reliable baker. Once you understand a few basic techniques, sourdough baking is fun and easy.

But I must repeat, before you get into sourdough bread, you must heal your gut ("the gut" is the scientific term for the entire digestive tract). First and foremost–*you must not eat any foods containing gluten* or other foods that cause you digestive upset or other symptoms.

In order to overcome gluten intolerance, we must heal the damaged gut or digestive tract.

This is done by observing four basic principles, namely:

1. Stop eating those foods that cause irritation
2. Bone broth to heal the intestinal lining (healing the leaky gut)
3. Probiotics are necessary to convert nutrients eaten to nutrients that can be used as well as assisting in the digestive process



4. Digestive Enzymes to assist a tired or compromised digestive tract

Stop eating Foods that Irritate: Most people with Gluten Intolerance end up with what is known as a leaky gut. The intestinal villi are damaged and the channels in the intestine for absorbing foods are larger than they should be. The gut is too porous, allowing food particles that are not broken down sufficiently to be absorbed into the blood stream. The result is often the development of food allergies. So, compounded with the inflammation and irritation caused by gluten, you now are allergic to corn, dairy, sugar, nuts and many other non-gluten foods. It is important to avoid all foods that act as irritants until the digestive tract is healed. Only then should you begin to introduce other foods. The raw vegan diet will most certainly tear you up with gas, bloating and pain! Eat soothing foods such as roasted vegetables.

Bone Broth: Once the gut has become a problem, we need the nutritional building blocks to restore the connective tissue lining of the intestines. This is where grandma comes to the rescue. Soup made with a soup bone. Of course, it makes the soup taste better but unbeknownst to grandma the bone and cartilage provide the perfect building blocks the stomach, small intestine and large intestine needs to knit itself into strong healthy tissue- tissue that welcomes the growth of the good bacteria (probiotics). Bone broth is also very soothing for an irritated digestive tract. Healing the gut may require you to consume from two to eight cups of bone broth each day depending on the severity of your condition. You have to make bone broth at home, on your own. Store bought broth is only chemically flavored water.

I know that we are not all going to eat soup each day and so on the days you don't have soup with a nutrient-rich bone broth, take a tablespoon of bovine gelatin. This is what Jello used to be made from (literally the ground up cartilage, ligaments and tendons of cows). Great Lakes is a good brand of gelatin.

Probiotics: These "good bacteria" that have become so popular are necessary in converting nutrients that we eat into nutrients that the body can use. 85% of the bacteria in your gut should be the healthy ones. Too many of the unhealthy flora (like candida and so many others) will result in cravings for unhealthy foods–sugars, carbs, and junk food. An unhealthy digestive tract is the reason so many children are picky eaters. By eating a healthy amount of probiotics, found in yogurt, kefir, kombucha, kvass, sauerkraut (homemade, not canned), sourdough bread and quality supplements, digestive health can be restored. Cravings for junky foods will diminish and your kids will actually begin eating things that are recognized as healthy foods. As parents, you may need to be sneaky to get probiotics into their tummies, but as you do, you will begin to see changes in behavior and pickiness.

Many find it easier to take probiotics in capsule form. You need to be taking a lot of probiotics from as many sources as you can to provide a rich diversity of the good bacteria. Don't skimp.

Enzymes: You must digest and break down the food that you eat. If the food is not broken down into small enough chunks, it can ferment (causing gas and reflux) or be absorbed as too big of particles creating an immune response (allergies). By taking digestive enzymes, we can insure that the food you eat is broken down. Your digestion needs to be good. Some can get by with taking a couple enzymes with each meal, however most will need to take more. Many may need to take up to five or ten enzymes with each meal as well as taking them on an empty stomach. By taking enzymes on empty, they act as powerful anti-inflammatory compounds that scavenge and clean up inflammation in the body. One common side effect of poor digestion is joint and muscle pain. High quality enzymes (we want good proteolytic enzymes) are important. Enzyme therapy has also proven to be effective in helping many severe health conditions. When eating, slow down and chew your food thoroughly.

And so what do you do with all of that wheat? As I see it, you've got two options. Either heal your digestive tract or give your wheat to the neighbor (the one who tells you "I'm coming to your house when the economy crashes", and buy a bunch of rice.

I have personally assisted hundreds back into the realm of eating delicious bread through the means outlined in this article. This article is a brief (unscientific) overview to this topic, and yes the science supports this. We only have time and space here to teach the general concepts. Understand that while gluten is vital for the delicious crumb of our bread, the sourdough process deactivates it, rendering it harmless to your digestion. Yes, gluten intolerance is a problem and yes, gluten is not a nutrient you want to consume too much of, but you can be healed and dining can again become a pleasurable and eagerly anticipated experience.

Bon Appetite!

About The Author: *Kyle Christensen, DC, ND, MH is the author is Herbal First Aid and Health Care, which is available on Amazon.com.*

LETTER from a NEW MEMBER

Women at Maine's first Civil Defense Staff College work with a 20' x 40' map of Baltimore that was used to locate assembly areas and evacuation routes, September 1955.

The week-long sessions, held twice a year, provided advanced training and leadership training to Civil Defense officials.

March 8, 2016

Gentlemen:

I came across your site while researching Civil Defense, particular as it relates to the State of Maine and Androscoggin County where both my wife and myself volunteered for some years. The reason I am doing this is that I firmly believe that the thousands of folks in this country who volunteered countless hours and time away from family and such should know that their efforts were well received.

It took a while but I have accumulated a lot of material from the Federal, State and local places. My goal is to give the people who did a lot of work for their countrymen the recognition they rightfully deserve, although belatedly.

There are few people living today who can recall their participation in this once important program. I have talked with some younger persons who do recall hiding under desks, etc. in their schools and I have also talked with some who actually remember this program, but, again, it is few. Our participation in Androscoggin County (Auburn, Maine) basically started early in 1954 through March of 1957, so you can see we did our part in Civil Defense. My wife, Ruth, now departed was the Asst. Director for Civil Defense and Public Safety, having started out as a clerk. I was one of the communication officers as I had an amateur radio license.

While it was a worthwhile program, eventually the time, effort and expense began to tell on our family, (nothing new about this) as I saw it more than once that some of the hard working staff had to resign because of time away from family. We resigned because we moved away from the area.

It appears to me that your organization is keeping CD alive which is very good. I wish more people today were aware of this great and important program but we know the Cold War years were over sixty years ago. My dues are included within.

Yours Truly,
S.L. Thompson

Our CHICKEN Orchard

– *A Sustainable Food Source*

By Jonathan and Kylene Jones

Chicken eggs are a tasty source of fresh fat and protein. We have had a little flock of backyard chickens for many years. We have made lots of mistakes and learned valuable lessons in the process. At long last, we have come up with the perfect solution for a sustainable food source.

We started our adventure by creating a little chicken coop with a run in the corner of the backyard. The chickens were fed kitchen scraps and expensive grains. This method took a lot of time and energy. It seemed like a huge investment for the return.

One day we visited a nursery that had a fenced area with a few fruit trees and free ranging poultry. We noticed that the birds were healthy and the orchard was weed free. A brilliant idea began to develop that we fondly refer to as our "chicken orchard."

Five years ago we took the plunge and built a small passive solar design shed which included nesting boxes and places for the birds to roost. Next we put up a chain link fence and planted the fruit trees. We access the coop through a repurposed industrial glass door in the front and the chickens access it through a little hole in the back of the shed from the orchard.

We planted food for the chickens in the orchard. All of our kitchen scraps, garden waste, weeds, etc. are tossed into the orchard. Twice a year we add a thick layer of straw to mulch the trees and provide an environment where the chickens

thrive. The chickens fertilize the entire orchard and keep bugs to a minimum.

It is a simple concept. Here is all you need to do:

Plant your chicken orchard with high quality poultry food sources in mind. A mulberry tree is a nutritious food source for birds and people alike. You might consider some of these sustainable food sources for your chickens:

- Trees produce large amounts of food and take advantage of high open spaces. Fruit, nut, honey locust (pods), and oak (acorns) are just a few examples.

- Shrubs are safe from the destructive nature of chickens once they are established. Chickens can eat the fruit as well as many of the greens on shrubs. Barberry, buffaloberry, coffeeberry, currant, elderberry, hackberry, hawthorn, goji berry, Russian olive, Sea buckthorn, serviceberry, and Siberian pea shrub are all good choices for poultry.

- Herbaceous plants can be planted where chickens roam or planted elsewhere and intentionally harvested for chicken food. One 30 foot row of Swiss chard will feed a flock of 25 birds throughout the growing season. We like to plant fodder beets that store all winter long to provide fresh food for our birds. Some examples of good choices include alfalfa, buckwheat, chickweed, chicory, cleavers, clover, comfrey, dandelion, fennel, lamb's quarters, plantain, hairy vetch, and kale. We give our chickens all of the garden waste with the exception of tomato plants. They are especially fond of raspberry prunings.

- Seed crops are great for chickens. Our girls love dried sunflower seed heads as well as the seed heads of Amaranth. Other ideas include barley, corn, millet, oats, quinoa, and wheat. We harvest the entire plant and toss it into the orchard and let them have at it.

All of the organic matter significantly increases the health of our orchard. The chickens work hard to till it up and add nitrogen in order to produce the best tasting fruit ever. The chickens are healthy and lead very happy lives. This microenvironment can be duplicated whether you have a few trees or 50 trees. Once the system matures, it can almost sustain itself, as long as there is the right balance between birds and habitat.

The chickens provide us with fresh eggs and very healthy fruit trees. We provide them with a great habitat, fresh water and a little bit of grain. It is a delightfully sustainable system. If things got really tough, those birds could survive without any grain at all and still provide us with eggs because of the intentional food system that we have created. Give it a try! •

Kylene and Jonathan Jones are the authors of ***The Provident Prepper—A Common-Sense Guide to Preparing for Emergencies.*** *Visit them online at:*
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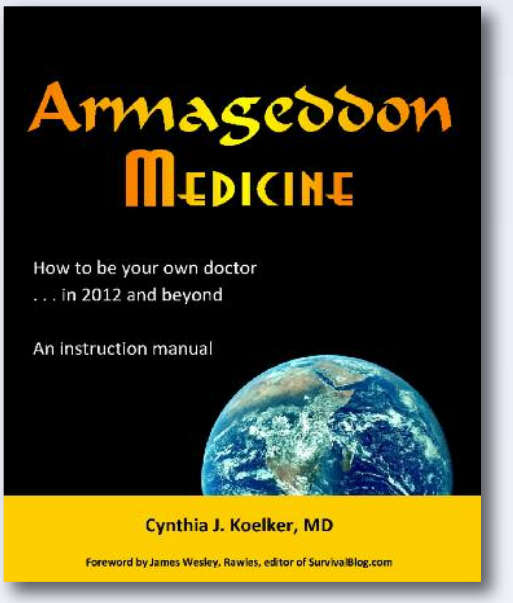

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