CERT: Protecting the Home Front

By AL MARCELLA, Ph.D., CFSA, CISA

s professionals, we are most often caught up with and focused on our daily job and profession – examining and assessing the internal controls within our organization or those within a client's organization. How often, however, do we turn our attention and watchful eyes inward, internally, and focus instead on our own residences? Our own communities? When was the last time you stopped to truly assess your safety and security both within and surrounding your personal residence?

CERT

I recently completed a three week Community Emergency Response Team (CERT) training course. While going through the training program, I had the opportunity to consider many potential community disaster scenarios and incident events. This experience made me acutely aware of the need to utilize my business continuity planning skills to assess my personal disaster emergency plans and preparedness.

To those who may not be familiar with CERT, here is just a brief introduction. First, the CERT which I am referring to here is not the CERT many IT security and audit professionals are familiar with (the federally funded research and development center

operated by Carnegie Mellon University). This CERT is organizing in a neighborhood near you. The CERT program educates people about disaster preparedness for hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations.

Using the training learned in the classroom and during exercises, CERT members can assist others in their neighborhood or workplace following an event when professional responders are not immediately available to help. CERT members also are encouraged to support emergency response agencies by taking a more active role in emergency preparedness projects in their community. There is a CERT overview paper located at http://training.fema.gov/EMIWeb/CERT/overview.asp that will provide interested readers wishing a more comprehensive description of CERT all the information one could ask.

CERT Benefits Are Not Just Personal

People who go through CERT training have a better understanding of the potential threats to their home, workplace, and community and can take the right steps to lessen the effects of these hazards on themselves, their homes, or their workplace. If a





disaster happens that overwhelms local response capability, CERT members can apply the training learned in the classroom and during exercises to give critical support to their family, loved ones, neighbors, or associates in their immediate area until help arrives.

When help does arrive, CERT members are able to provide useful information to responders and support their efforts, as directed, at the disaster site. CERT members can also assist with non-emergency projects that improve the safety of the community. CERTs have been used to distribute and/or install smoke alarms, replace smoke alarm batteries in the home of elderly, distribute disaster education material, and provide services at special events such as parades, sporting events, concerts and more.

Looking for a potential audit recommendation to senior management that does not require the expenditure of financial resources yet provides exponential value-added returns? CERT training is free, and CERT-trained employees can be utilized to provide an extra measure of support for corporate safety personnel and first responders in the event of an office-wide, employee emergency event. For additional information on starting your own internal CERT, check out "Starting and Maintaining a CERT Program," at http://training.fema.gov/EMIWeb/CERT/new CERT/index.htm.

Protecting The Home Front

Applying the newly acquired skills from my CERT training and my professional continuity planning background, there was a logical connection and skills transference to conducting an assessment of my personal, residential safety and emergency plan.

Disaster incidents can happen at any time, and we certainly do



not have advanced warning that such events are going to occur. Within the past 12 months, for example, communities have experienced disaster incidents such as:

- Earthquakes (California, Missouri);
- Floods (Yosemite National Park and California including severe storms, flooding, landslides, and mud and debris flows);
- Tsunami (Thailand);
- Volcano eruption (Mount Saint Helens);
- Cyclones (Asia and South Seas; Ingrid, Percy, and Olaf, including high winds, high surf, and heavy rainfall);
- Hurricanes (Florida and the U.S. east coast; Katrina, Ivan, Frances, etc.);
- ◆ Tornados (Nebraska and South Carolina); and
- Fires (South Dakota)

Are you and your family prepared to survive any one of these and the many more natural disasters that are geographically specific to your residence? Most people living in the "danger zone" of these natural disasters prepare themselves and their families to ride out the storm and survive Mother Nature's frontal attack.

The critical question, however, is are you prepared to survive the aftermath of such an incident when there is no guarantee that relief is coming immediately? Are you and your family prepared to survive the first 72 hours after a significant disaster event, which may impact the ability of emergency services from responding to all but the most critically injured?

Post Event - The First 72 Hours

It is during this time immediately following the disaster event that emergency services are stretched to their breaking point. It is most likely that emergency services, if they can reach victims, will tend to those most seriously injured and then as time progresses, move down the list to attending to the displaced and uninjured.

Can you and your family survive this limbo period? Can your neighbors?

One of your most important survival apparatus will be your family's emergency recovery kit (ERK). An ERK contains the basic essentials you and your family will need to survive, unassisted for three days (72 hours) after a disaster event, that affects your local community and the community's infrastructure.

Outfitting and maintaining your ERK is quite simple, and the time you spend now, preparing your ERK, will be a wise investment should an emergency arise. The value of your ERK will be immeasurable should you ever need emergency access to its contents. Surprisingly, many families have never taken the time to prepare a customized ERK, regardless if they live in danger zones or not. Disasters can occur anywhere, at any time, danger zone or not.

Outfitting a Personal/Family ERK

Outfitting your ERK begins simply with an assessment of your personal and family needs. The following questions, by no means all inclusive, can be used to begin this assessment process and assist you and your family in preparing to survive the first 72 hours after an emergency event and to outfit your ERK:

- In the event of an incident (disaster neighborhood, community, local), does your family have a customized family incident management plan?
- 2. Have all family members discussed what to do in the event of a local residence and/or community emergency?



- 3. Does every family member know what to do in the event of an incident, which impacts the immediate home environment?
- 4. Does your family have a pre-arranged place to meet, in the neighborhood, away from your residence, to re-assemble and for family member accountability?
- 5. What type of emergency supplies can my family and I access immediately following an incident? What are the "most critical" supplies we will need?

Does your ERK have an ample supply of bottled water? According to Dr. William Forgey, author of "Wilderness Medicine," you will live two days at 120 degrees Fahrenheit; five to seven days at 90 degrees; and eight to 10 days at 60. You probably won't last this long if you are moving about, working, perspiring, and/or injured and do not have a sufficient supply of drinkable water. Drinkable water is critical to you and your family's survival.

- 6. Storing multiple bottles of water impractical? Consider purchasing a water purifier. Rain water and most sources of standing water can be a potential source in an emergency, armed with a water purification device, your survival chances just increased. Treating a water source using stabilized chlorine dioxide as a germicidal agent offers a safe and highly effective way to acquire prospective drinkable water. In a pinch, 72 hours, this could be a lifesaving option.
- What types of non-perishable food supplies have you packed in your ERK? Do you have enough for 72 hours extended life support without the local re-instatement of basic services (e.g., electric, gas, water, etc.).

In today's identity theft prone virtual society, would you be able to prove who you are if you had to? Could you prove you are the actual, legal owner or resident of the property which you are attempting to re-enter or remove valuables?

- 8. Does your ERK contain duplicate copies of all critical personal documents (e.g., driver's license; passport; life, home, and auto insurance policies) and the phone numbers for their respective national customer service centers (your local agent's number is handy, too. However, consider that he/she may also be affected by the disaster event and be unable to assist you and your family for some time).
- Does your ERK contain recent color photos of all family members? These
 photos may be critical in assisting emergency personnel in reuniting
 missing family members.
- 10. Are all of these documents (and any other documents you consider critical) stored in a waterproof container to avoid damage which may negate their use/value to your survival efforts?
- 11. Do you or any of your family members take prescription medications? If so, does your ERK contain a 72-hour supply of these prescription medications? For specialized medications which require refrigeration, an emergency "go bag" should be filled, maintained, and stored within easy reach in your refrigerator, ready to be grabbed in a moment's notice as you exit your residence. As with all supplies, especially medications that have a "shelf life," regular rotation and destruction of expired emergency supplies is a required and mandatory maintenance procedure.
- 12. Have pets? Have you stocked your ERK with non-perishable food for your pet(s)? They will need nourishment as well. Store non-perishable, dry, pre-packaged food items in plastic ziplock bags. As you use the food, the empty bags can be used for countless sanitary and hygiene requirements.
- 13. Nighttime, winter, rain, anytime that there may be an extended period before a resumption of normal services and routines, you and your family will require sleep. Does your ERK contain emergency blankets? Maybe a tent? Today's camping supplies are made of extremely lightweight, durable, and compact materials. Packing for a family, consider multiple tents (they pack into a smaller bundle verses a larger tent) or at least consider packing ground cloths for constructing a temporary lean-to.

- 14. Do you have small or infant children? Does your ERK contain powered milk, baby oil, formula, diapers, or multiple changes of clothing?
- 15. Hygiene will quickly become a family issue trust me on this one. Does your ERK contain specific personal hygiene supplies for all family members, all genders? Critical, does your ERK contain an adequate supply of toilet paper? Rationing this by the square is not a chore you want to be saddled with in a recovery situation.

Since your ERK is designed to make you and your family self sufficient for 72 hours, it will also represent your first line of defense for self treatment of minor injuries that you or a family member might sustain as a result of evacuating your residence or from the aftermath of the incident.

17. Does your ERK contain adequate first aid and emergency medical supplies? On this issue, you may consider more is better than less. Be prepared for potential visits from less or under prepared neighbors and be willing to share supplies.

A well-supplied first aid kit must be tailored to the individual needs of your family. Existing health problems in the family (for example, heart disorders, diabetes, serious allergies, asthma, or ulcer) may make it necessary to include specific medicines in your first aid kit. It is also necessary to consider the ages of family members. See the accompanying side bar for a detailed list of first aid kit supplies. Remember, this is just a list, your personal family situation may require you to supplement this suggested list.

- 18. Did you pack your ERK with an envelope containing cash (small bills)? If there is no electric service, ATMs will not operate and neither will check clearance services. You may be forced to purchase necessary supplies (e.g., food, water, diapers, etc.) with cash. Do you have enough cash, stored in a waterproof container in your ERK to be self-sufficient for 72 hours after a disaster event?
- 19. Have you placed several rolls of that universal, do all, fix all, duct tape into your ERK? Duct tape is waterproof, you can write on it, and it can be used to mend, build, seal, and tie down almost anything and everything. No ERK should be without several rolls of this wonder product.

Other Supplies to Consider

Are there other supplies that you might consider outfitting your ERK with? Of course! But no list, like most lists of this type, can ever really be complete or fit every individual personal and family need. Thus, it is critical you perform a family disaster/incident preparedness assessment and determine for yourself what specifics you will require within those first 72 hours.

Purchase one or more containers and stock them with the supplies that will be critical to you and your family's sustained survival – you may have to go it alone for several hours, a day, or longer before help arrives.

One very critical consideration in preparing your ERK, you must be able to find/locate it, access it, and use its contents when necessary. Hint: your ERK should be a container (or containers) made of a durable material, brightly colored for easy identification, water resistant (waterproof would be ideal) and able to withstand being tossed about, dropped, and have debris land on it. If it can't take a licking, then the ERK may not survive intact and thus, its value to your and your family's survival is suspect.

What additional items should you consider? The following is far from a complete list but some items you may find necessary, beneficial, essential, or even critical. Thus consider including in your ERK the following items:



- Extra batteries (AAA, AA, C, and D). Don't store batteries in the flashlight or appliance. Use ziplock bags and tape the bag to the appliance for quick and easy access to the batteries.
- Seasonal clothing (rotate bi-annually or as necessary by location)
- Snap lights (glow sticks) as an alternative light source
- Battery operated radio
- Local area road map (you may need to plan an evacuation route or provide directions to a rescue crew unfamiliar with your community).
 Waterproof the map with an easy to obtain, over-the-counter waterproofing spray. If the map is soaked, torn, or unreadable, it will be of no use.
- Extra set of house and car keys (you probably did not grab these as you
 evacuated your residence and may need these to lock up after the event
 or even to move your car)
- Garbage bags with twist ties. After several hours, trash and other types of waste will begin to accumulate. Keep a clean, sanitized recovery area.
- ◆ Ziplock bags for obvious reasons and plenty of storage options
- Small fire extinguisher (check charge status regularly)
- Candles
- Matches in waterproof container (alternatively a butane fire starter, the type used to light grills)
- Entertainment items (e.g., deck of cards, board game, etc.). Kids (and even adults) will become bored easily and they may need as well as benefit by having the distraction and means to occupy their time.

Remember; treat your ERK as you would your home fire/smoke alarms. Smoke and fire alarms need a regular inspection examination, as will your ERK. Re-assess your recovery/survival needs regularly, even more importantly as family dynamics/situations change (children grow, aging parents move in, etc.), augment and rotate your supplies when necessary and appropriate.

Conclusion

Once you have assessed your potential exposures and risks, identified the emergency supplies you will need to survive for 72 hours, and prepared your ERK, where do you keep your ERK?

Remember, access to these critical supplies may spell the difference between life and, yes, maybe even death. Logically, people default to storing their ERK in their homes/residences. Logical right? But *where* in your home/residence?

Consider for a moment if you store your ERK in your basement and there is an event which prevents you from reaching the basement. How will you be able to retrieve your ERK? In an unstable building, your ability to walk around may be severely limited – you may be fleeing the building or not allowed to reenter after the event.

Depending on your personal environment and housing particulars – each person's decision where to store their ERK will be determined independently – one size (or solution) does not fit all. If feasible, consider storing your ERK in your garage or an exterior building, anywhere it can be quickly accessed should it be needed. One may ultimately consider duplicating the ERK and keeping each in separate location.

Perhaps you could organize a community CERT in your very own neighborhood. Each CERT member then prepares and maintains a family ERK. The probability of having access to a neighbor's ERK, should your family's ERK be inaccessible, is higher than depending on your ERK alone. You might even meet new neighbors, renew acquaintances, make new friends, and learn a whole new skill set while at the same time becoming even more of a valued employee for your employer.

List of Basic First Aid Supplies	
First aid manual	
Antiseptic solution – lodine compounds such as Chlorhexidine. (Ask your druggist for these.) NOTE: Do not use mercurochrome or merthiolate.	Water purification – for each gallon of water, use four purification tablets, or 12 drops of Tincture or Iodine, or 13 drops of liquid chlorine bleach. If water is cloudy, double these amounts.
Neosporin	Rubbing alcohol – 70 percent
Antiseptic soap	Aspirin tablets
Normal saline solution – one teaspoon table salt to one pint water	Acetaminophen tablets (Tylenol)
Diarrhea medicine	Nausea medication – such as Etnetrol
Tweezers	Scissors
Safety pins – assorted sizes	Measuring spoon
Matches – in waterproof case	Paper drinking cups – for administering liquids
Heavy string	Small splints – popsicle sticks, tongue depressors, etc.
Band-Aids – assorted sizes	Cotton – sterile, absorbent
Gauze rolls - 2 inch, 3 inch, and 4 inch	Dressings – 4 x 4 inch, sterile
Tape roll – 2 inch wide (micropore tape, paper tape, or adhesive tape)	3 triangular bandages (slings) – 40 inch
2-inch sterile roller bandages (3 rolls)	3-inch sterile roller bandages (3 rolls)
Sanitary napkins – can be used for pressure dressings	Elastic bandage
Sewing needles	Disposable diapers – can be used for dressings or for splint padding
Insect repellent	Caladryl
Individual medical needs	Latex gloves (2 pairs min.)
Moistened towelettes	Antiseptic
Thermometer	Tongue blades (2)
Tube of petroleum jelly or other lubricant	Syrup of Ipecac (used to induce vomiting if advised by the poison control center)
Laxative	Activated charcoal (used in cases of accidental ingestion of harmful liquids)
CPR mask and gloves or rescue breather (2 boxes or packages)	Red bio-hazard disposal bag (2)
Waterproof penlight	Irrigation syringe
Space blanket	Decongestants
lodine	Prednisone Rx
Penicillin Rx	Epinephrine injection kit
Anti-nausea tablets	Calamine lotion
Electrolyte tablets/powder	Dextrose tablets/gel
Instant chemical cold packs	Hand warmer

Above all, follow a basic rule of thumb – be prepared! Be pro-active! Be ready to take charge of your and your family's personal safety.





Al Marcella, Ph.D., CFSA, CISA, president of Business Automation Consultants, LLC, is an internationally recognized public speaker, researcher, and seminar leader with more than 25 years of experience in IT audit, security, and assessing internal controls. An author of numerous articles and 26 books on various audit and security related subjects, Dr.

Marcella's latest book, "Business Continuity, Disaster Recovery and Incident Management Planning: A Resource for Ensuring Ongoing Enterprise Operations," (Institute of Internal Auditors, www.theiia.org, ISBN 0-89413-527-9), examines the critical and interdependent networking considerations of disaster recovery and business continuity planning that include Internet, intranet, service providers, and client server-based applications that are the core of today's businesses. Dr. Marcella can be reached at (314) 961-2006, ext. 7544 or via e-mail at amarcella@mindspring.com.

