WHAT TO DO WHEN THE SHIT HITS THE FAN

Are you prepared to deal with an emergency?

- Terrorist Attack
- Hurricane
- Tornado
- Earthquake
- Flood
- Civil Unrest

Dave Black

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Dedication

Every book I've seen on Emergency Preparedness in the last ten years has relied heavily on two main sources for their information: FEMA and the American Red Cross. In fact, many books are essentially word-for-word copies of FEMA and Red Cross materials, probably because they are the best source of comprehensive preparedness material. There are some inevitable similarities in portions of this text because the basic steps of preparedness and planning are unavoidably common to every agency or individual who provides preparedness information or training. Hopefully I've provided some additional unique information that will be both interesting and useful, and from a fresh and honest perspective.

It's impossible to write a book like this without dredging up a lot of memories, good and bad. I did a lot of thinking about old paramedic and firefighter partners. It's been years since I've seen any of them, but the respect I have for their bravery and skill is no less now than it was when I rode with them. I dedicate this book to them. I will also take this opportunity,to thank the Red Cross for all the support they provided us on those long cold nights and blistering days when we were fighting fires or dealing with other tragedies.

Dave Black
Blanding, Utah, 2007

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Introduction

1. The Author's Background

I'm a baby boomer. As a typical kid in that generation living in 1950s California, I learned through the paranoia of my parents and teachers that disaster and doom were just around the corner in the form of a giant earthquake or a nuclear holocaust. We trained in school to crawl under our desks, as though this move would save us while everyone else in southern California was being vaporized by the blast. My parents bought into the bomb shelter idea, and I remember sitting on the couch listening to traveling shelter salesmen present their doomsday routines. It was an odd time to be growing up. Communism was the greatest evil and would surely bring the world to a horrible end. My parents moved to Utah, partially to get away from the nuclear and earthquake threats, and partially because they were Mormons. Interestingly, one of my most vivid memories is of the Bear Lake earthquake in 1959, which left some cracks in our house. A second is of the Cuban missile crisis. The earthquake was interesting and even fun, but the Cuban crisis was the first time I can remember stark, stomach-wrenching fear. For a day and a night, we all thought our lives would be snuffed out and the world destroyed.

Through all of this there was one thing I took comfort in. The Church had for decades insisted that member

families put together and maintain a two-year stockpile of food and essential supplies, and my parents complied. It was an inconvenience and seemed unnecessary at the time. My parents had experienced the Great Depression and knew the value of preparing for the worst, but I was part of the Pollyanna *Leave It to Beaver* generation that was unaffected by real disasters. In the end the two-year supply did provide some psychological comfort, and now that I've had fifty years to see the real world I realize it was exceedingly smart to have that sort of resource available.

When I graduated from high school in 1970 I did what good Mormon boys do. I went on a two-year mission. Mine was to Bolivia. During my time there I went through two revolutions and half a dozen riots. My apartment was dynamited, I was shot at, and old P-51 Mustang aircraft bombed and strafed our neighborhood. Worse than all that, my mission president's wife took a disliking to my rebellious attitude and haircut and I eventually found myself banished to work with the rural Quechua, one of the most mistreated, impoverished peoples in the Americas. Assignment to the Quechuas was supposed to be a punishment, and for nearly two years I lived in the Andes at 14,000 feet with no electricity, no running water, no heat, plastic on the windows of my thatched mud hut, and the countryside as my toilet. I ate the native diet and cooked on fires and gas stoves. Transportation was in the back of a truck or by burro. When I was hungry or cold I chewed coca leaves or drank coca tea. I learned to huddle beneath my poncho with a tiny candle to keep myself from freezing. I even delivered babies and removed bullets. I lived the austere Third World life that most spoiled Yankees have no sense of. In the end I distanced myself from the church

and the city-based missionaries. I came to understand and thrive in the conditions the bigoted old president's wife had condemned me to. These were lessons that I will never forget, and they are the fundamental lessons that made me feel I could survive almost anything. My first week back in the States, a major winter storm snowed the town in and caused a three-day blackout. I took it in stride, warming myself with a candle under a poncho and cooking on an old alcohol camp stove. It was obvious that the effect a disaster has on an individual is relative to what a person is used to dealing with.

After some long years in the military in intelligence and special ops, I became a ski bum. Real ski bums are always broke, so to get a better handle on cash, I tested for a firefighter position and was soon hired on with a very busy fire department in Ogden, Utah. It was my second year with the department when an incident occurred that suddenly made me an "expert." Two boys and their dog were stranded on a steep cliff above the swollen Ogden River. One of the boys had fallen and was hanging on precariously, waiting for rescue. The fire department could not reach them from above, and the ladder truck had not been able to reach them from across the river. I was on my day off, in a hot tub, when the department called. To me, a climber of twenty years then, the rescue was easy and unspectacular. The next day, however, a picture of me dangling near the patient was on the front page of the *Chicago Tribune*. Within days I was fielding calls from fire and rescue agencies all over the country, asking for training. I rushed myself through paramedic school and by the end of the year I found myself carrying multiple pagers and radios to keep in contact with all the volunteer and

specialized rescue teams I was involved with. I was fighting fires and seeing a thousand critically ill or injured patients a year in the streets, dealing with the demons that burned out paramedics deal with. It was too much to handle, and I quit the fire department and disappeared into the rural west to work with small EMS agencies. Later I graduated from Weber State with a composite bachelors degree in Foreign Languages, Emergency Care and Rescue, and Geology and almost immediately found myself overseas building EMS and community disaster response and management systems in places like Saudi Arabia, the Balkans, and the former Soviet Republics. With the exception of three years at Weber State University as the administrator of their external health sciences studies programs, and three years as an emergency planner for the health department in Utah, consulting has been my mainstay. There's nothing more satisfying than learning that the training I have provided was used successfully to save some lives. I've had that amazing experience several times now, and I feel lucky for having found myself in the position to provide that training.

It's with this perspective that I bring you this book.

2. The Nature of Disaster

What constitutes a disaster is relative to the event and the effect it has on the individual or group. We, as Westerners in the Northern Hemisphere, are spoiled and prosperous. Even our poorest would be considered prosperous in the eyes of poorer people like my Quechua friends. Our prosperous lives and governments shield us from discomfort and discontinuity. A drought in California just raises prices in

America. A drought in eastern Africa could kill millions. A disaster to a Quechua Indian would be an earthquake that crushes his mud hut, kills his children, and wipes out his village. A broken fingernail could be a "disaster" to a New England debutant.

A disaster is commonly defined as an event causing widespread destruction and distress. A grave misfortune. A crisis event that surpasses the ability of an individual, community, or society to control or recover from its consequences. For most North Americans a disaster is something nasty that happens to somebody else. Look it up on the Internet: there are as many different definitions of the words *catastrophe, disaster,* and *emergency* as there are Web sites that define them.

For those who need some coaching on the nature of disasters, here are some searing truths: Recent events (9/11, Katrina, bird flu) have reminded us, even in our protected cocoons of technological sophistication and prosperity, that we are virtually powerless in the face of nature and that an entire region of the country (e.g., New Orleans) can go from normality to catastrophe in the blink of an eye. Major disasters are a recurring fact of life for every generation, and the fact that we have not been visited by major disasters in the United States for two centuries only means that we are long overdue. The fact is that we are not much more prepared in a practical sense to survive a long-term widespread disaster than our poorer counterparts in other countries who deal with similar situations on a daily basis. The only way we seem to relate to disasters is vicariously through the unrealistic eyes of Hollywood, with their asteroids and living-dead epidemics, and their superheroes who save us from certain doom.

Let's take a look at some real disasters. There's a long list to choose from, so let's stick with disasters that have occurred since 1900. Here's a brief glimpse of a few modern catastrophes:

First on the list is war, and for our purposes we'll list World War I and II together. Starting in 1914 and until the Japanese surrender in 1945, this disaster resulted in the deaths of 70 million people, most of them civilians. It included some amazingly cruel stuff, like the Rape of Nanking, the Holocaust, the atomic bombing of Hiroshima and Nagasaki, the bombing of Dresden, the sinking of the *Lusitania* and the *Wilhelm Gustloff*. The effects of this disaster will linger for centuries, as have the effects of other wars. Look at the Crusades. Christian crusaders took Jerusalem and slaughtered everyone in the city—90,000 people. Nine hundred years later we see the indirect results: terrorists bringing down our skyscrapers and our young people being blown up with improvised explosive devices in the streets of Baghdad.

In 1918 an influenza pandemic broke out. It may or may not have started in Europe, but it really took hold when it was spread by the troops fighting or preparing to fight in World War I. By 1919 it had killed 70 million people, second only to the worst episode of the plague in the Middle Ages, which killed 75 million in thirteen years. In the United States the influenza killed over half a million. Most Americans would tell you that such an event can't happen again because of our superior medical understanding. The truth is that we still don't have a cure for influenza. It still kills thousands of Americans every year, and some nasty new strains are worrisome to health officials. We know little more about the virus

than we did after the 1918 pandemic. Another virus, HIV (AIDS), will kill 90 million in Africa alone by 2025, and malaria continues to kill a million people each year. Pandemics are continuous, and it is unlikely that we will ever be pandemic-free.

The Hwang He and Yangtze rivers floods in 1931 killed 140,000 Chinese. But the real killers were the resulting famine and disease, which killed another 3 million.

The Chinese famine of the late 1950s killed 40 million people. It could be considered the worst man-made disaster of the century because it was caused in large part by agricultural reforms mandated by the Chinese government.

Floods continue to kill with remarkable effectiveness. The 1970 Bangladesh cyclone saw 500,000 die in the storm surge.

The Indian Ocean tsunami just after Christmas of 2004 killed a quarter of a million people, many of them Westerners on vacation. It was the worst tsunami ever recorded and was caused by a large undersea earthquake.

Hardly a day goes by without news of an earthquake somewhere. The Kashmir and Pakistan earthquake of 2005 killed 100,000.

When you glance at the brief descriptions of these and other disasters it should become obvious that there can be an enormous list of bad after-effects from large disasters. The big killers are famine, disease, and flooding. Flooding almost always leads to ruined crops, famine, and disease. Earthquakes lead to tsunamis and turn cities into infernos. Volcanoes cause tsunamis and can spew enough debris into the atmosphere to cause major drops in the world temperature, leading to famine and disease. Nuclear and chemical disasters can kill for years.

Another uncomfortable truth stares us in the face as we look at the recent history of disaster: technological disasters are increasing as our reliance on technology increases. Bhopal, Chernobyl, the atomic bombings of Hiroshima and Nagasaki, and large-scale computer crime foreshadow the disasters we will face in the future. Global warming is an ominous natural event fueled by man's disregard that has the potential to generate major catastrophes.

We have some very recent reminders of our vulnerability: terrorism, the threats of SARS and avian influenza, the turmoil the entire nation experienced with a hurricane in a small region of the country that killed fewer than 2,000 people. These things remind us that we need to be ready. Nothing has changed. Disasters always have happened and always will happen. A key to peace of mind is preparation. Another key is taking responsibility. Every disaster starts at the individual level. It then becomes a local responsibility, then a state problem, and then, if the disaster is big enough, a federal responsibility. During and after Katrina, public outrage was aimed at the wrong people. Your safety is ultimately your own responsibility. The fate of a city is the mayor's responsibility. A state is the governor's responsibility. Blame for Katrina immediately went right to the top. The scapegoating conveniently let individuals, city officials, and state agencies off the hook for their own failures to prepare for the disaster and to enforce measures to protect the people they were responsible for.

You can live your life in denial and blame others for your own failures. The lazy among us will most certainly do that. The smart ones will prepare and take responsibility for themselves.

Different experts classify disasters in their own ways. For simplicity we'll divide them into *Natural Disasters* and *Man-made Disasters*.

Natural Disasters

Natural disasters are the most consistently catastrophic in terms of shear death toll. These include earthquakes, volcanoes, floods, cyclones and hurricanes, tornadoes, droughts, and slope failures. We are essentially powerless against these disasters except for mitigation and effective response, and they often produce horrific effects well outside of the immediate area they first occur in. Impoverished areas suffer grossly higher death tolls due to their architectural inferiorities and deficits in their medical systems, then disease and famine follow.

Although flooding generates high death tolls, famine and disease take the prize for the biggest killers. Often the three work in combination. Aside from the initial drownings, flooding causes sewage and drinking water to mix. Rotting corpses add to the water pollution and disease inventory. The most prevalent diseases are gastrointestinal diseases that characteristically cause severe dehydration (e.g., cholera), which, in turn, cannot be relieved adequately because of the lack of clean water.

The interesting thing about disasters involving disease is the ominous way in which they show up. Diseases usually emerge over a wide area and over a long period of time. They're often not treated as disasters until the media picks up on the situation, and then public opinion forces government officials to take action. By the time the full gravity of the situation is realized, the disease is out of control.

Man-Made Disasters

These are the disasters that are caused by humans through negligence, technological failure, fanaticism, or shear mean-heartedness. Fire, war, and religious fanaticism have been the traditional causes of these kinds of disasters, but other common causes include civil unrest, building collapse, industrial accidents, and transportation accidents. As we urbanize and our capacity to produce, store, and transport hazardous materials and technologies grows, so does the potential intensity of a disaster.

3. The Truth About Disaster Planning

Disaster planning is discussed in some detail later in this book. For now I'll leave you with the following fact-based opinion.

A list of potential disasters would be larger than this book. But the effects of all disasters have some things in common, and it's these common effects that we need to prepare for. It's like making cakes. Cake is flour, sugar, salt, eggs, milk, shortening, and a little baking soda or baking powder. There's a basic procedure for mixing and baking cake. Some pots and pans, bowls and spoons, and an oven are needed to make cake. We have this all put together in one kitchen. It wouldn't make sense to have separate kitchens, each with its own ingredients and its own pots and pans and utensils, for each kind of cake we might bake—one kitchen for lemon cake, another for chocolate cake. That's often the problem with both individual and government disaster

planning, especially within government health agencies. Commonly each disaster is planned for individually, and a different "kitchen" and procedure is developed for every type of disaster. Plans get way too complicated, and soon the collection of individual plans is too bulky and complicated to be practical. Unfortunately, this is where a lot of public money has been wasted since the federal government started dumping money into the local and regional emergency management systems and the health departments as a result of 9/11 and the war on terrorism.

Although in the United States some definite progress has been made in preparation for terrorism and disaster response, an enormous amount of money has been wasted on redundant, repeated projects and inefficient handling of training and materials. Turf wars between agencies and individual egos get in the way of progress, and endless conventions and conferences in lavish hotels drain the coffers that you fill with your tax money. Many of the individuals hired to carry out projects are either unqualified for the jobs they are assigned to or are siphoned off into other work not directly related to disaster planning. There is little oversight and little incentive to improve this situation. In the end, your best bet is to prepare yourself and be pleasantly surprised if the government response is good, rather than to make no personal preparations and expect an immediate response from overwhelmed and inefficient government agencies.

Chapter 1
Emergency Management

It certainly makes sense for us all to be aware of the inner workings of the emergency planners and responders whose job it is to save us in a disaster.

1. Phases of Emergency Management

Emergency planners and managers are concerned with the four phases of a disaster: mitigation, preparedness, response, and recovery. These phases also relate to individuals, families, and businesses in the plans they make.

Mitigation consists of action that prevents disasters from occurring, or actions that limit the damage done by disasters when they happen. Mitigation is based on risk assessments. Mitigation may be related to structure or location, and very often includes insurance protection.

The preparedness phase is when action or response plans are developed, and resources are identified and stockpiled.

In the response phase, professional and volunteer emergency services teams and organizations mobilize and respond to the actual disaster. Individuals and families might shelter in place or evacuate during this phase.

The recovery phase starts when the immediate threats to life have passed. The disaster may still be in progress, and the recovery may take weeks, months, or years. The recovery phases takes into consideration both the restoration of daily life to normal, as well as mitigation of future disasters. In other words, now that you know what needs to be done to survive the next disaster, get it done.

2. Emergency & Disaster Professionals and Volunteers

Professional emergency managers come from diversified backgrounds and are responsible for government and community mitigation, preparedness, response and recovery. Typically in the United States emergency management positions were political in nature and a manager with real experience in emergency response and disaster management was the exception rather than the rule. The typical manager has had a background in law enforcement or fire service, but little or no experience in emergency planning. Since 9/11 the trend has been either to hire managers with specific emergency management training or require managers to acquire specific training in office. The result has been a relative increase in the competence of emergency management. There are now professional associations for emergency managers, and some professional certifications are now available.

At the front line of any disaster are the actual first responders: the fire service, law enforcement, and emergency medical services.

Essentially, law enforcement is responsible for civil tranquility and security as well as crime prevention, investigation, and surveillance. In many rural areas, local law enforcement is responsible for search and rescue. Many law enforcement agencies include specialized teams, such as bomb and SWAT squads. Law enforcement also includes state and federal police.

The fire service is typically responsible for fire suppression, hazardous materials operations, and search and rescue. Firefighters are usually trained to standard levels as Firefighter 1 through 3, and for hazardous materials

Reference/Home

ARE YOU PREPARED FOR ANY EMERGENCY?

Recent events have taught us all that anyone, anywhere can face an emergency situation. Do you have the tools, equipment, and knowledge to ensure the safety of your family? With the expert advice in this handbook, you can be better prepared for any emergency:

- Terrorist Attack
- Fire
- Flood
- Tornado
- Winter Storm
- Hurricane
- Landslide
- Earthquake
- Drought
- Nuclear Emergency
- Civil Unrest
- And more

Here Dave Black addresses the full range of disasters that can turn an ordinary day into a fight for survival. He offers advice on alarms, insurance, preparing a "disaster kit," planning for evacuation, communication, emergency food handling, first aid, and more. With real-world considerations, he lays out the step-by-step responses that could save you and your family in a time of crisis.

DAVE BLACK is an internationally recognized consultant in emergency planning and disaster response. With nearly 20 years of experience in search and rescue and as a wilderness and urban first responder, he has served as a consultant and architect of community disaster response and management systems both here and abroad.

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