

Safety After Disaster Transcript

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The CERT team is important to the community because after a disaster there's times when the fire department or other emergency people are overwhelmed. The CERT people actually provide care until the professionals can arrive. There's a big difference between an amateur rescuer and a professional rescuer. An amateur rescuer will think with their heart where a professional rescuer is supposed to think with their brain. A bit of training, a little bit of education, a little bit of preparation you can minimize casualties and in some cases even completely avoid them.

You need to take care of yourself, that's the number one rule, take care of yourself and your buddy after a disaster. They just need to know to expect the unexpected.

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After a disaster occurs the environment may be dramatically changed, chaotic, and even dangerous. Even familiar landmarks in a neighborhood may be uprooted. Roads may be washed out. Nothing is the way it was. A disaster itself, whether it's an earthquake or a hurricane or a flood or something like that, the event isn't ongoing. The event itself may stop, but the danger period doesn't and very frequently the hours right after a disaster is as dangerous as the disaster itself. Disasters tend to destabilize the environment and that makes familiar areas unfamiliar so it's wise to proceed through the debris of a disaster sort of like someone walking through rattlesnakes, slowly and carefully. I've seen devastation, total devastation. I've seen moderate damage, I've seen minor damage. That's why what we try to do is we try to teach people basics that can be applied no matter what the system or what the problem is.

But as powerful and devastating as disasters can be, experts now know many injuries and deaths occur after a disaster has happened as inexperienced volunteers rush to help out. After a disaster one thing that's always surprised me was to a certain degree people's lack of respect for Mother Nature and what she can do out there. After pretty much some type of natural disaster things just aren't how they appeared before the disaster and there are ways people can get injured out there whether it's drownings or electrocutions because of downed power lines so you really have to respect Mother Nature both before and after disasters.

The CERT program is a wonderful educational opportunity but it's also an opportunity for us in the emergency services to make sure not only we know what people can do but also that people know what they can't do and in rescue operations there is a high percentage of people who get hurt or killed trying to help others. And so like firefighters and other first responders, CERT volunteers need to focus on safety with every task they're involved with.

Safety must be a priority. CERT member safety is of the utmost importance. We want them to be safe if they're going to go out there, we don't want them risking their lives. We want them to be able to help people safely and not get injured and certainly not get killed in doing their job. We want to show them how to do it in the safest manner so they can come back and be okay after it's all over.

Every disaster brings its own kind of hazards. Fast moving flash flood waters, fires and lightning can all be dangerous. Hurricanes and tornadoes bring torrential rains and wind, but the chaos resulting from the disasters like downed power lines, natural gas leaks, washed out roads, hazardous materials, sharp objects, and other flying debris can often be more devastating and cause more injuries or deaths than the event itself.

Moving flood waters cause many deaths in communities across the country every year because people underestimate the power and ferocity and fast rising nature of the waters. Second only to fires, floods are the most common and widespread disaster. For example six inches of moving water can knock a person over and two feet of water can float a car. Flood waters can also become quickly contaminated and may contain all kinds of debris including raw sewage and toxic waste. For more information on the dangers of flooding, please visit the Turn Around Don't Drown web site at the address shown here.

A hurricane or tornado can cause massive destruction to buildings, homes, and even automobiles. Broken glass, falling panels and collapsing walkways and stairways are some of the debris that may result and buildings that appear unharmed from the exterior can be structurally damaged and unsafe to enter. Utilities may be damaged or shut off.

Fires can be very destructive because they can begin so quickly and cause such devastation. Because cities have grown into suburbs, and suburbs into what was once rural America, more homes are now part of what has been called the wild land urban interface. Wildfires can begin unnoticed and spread quickly igniting brush, trees, and homes, and resulting in miles of destruction.

Hazardous materials and other biochemical spills on roadways, waterways, and railways can spread rapidly and produce toxins that can be extremely harmful for miles around.

Debris of all kinds is probably the number one hazard in a disaster area. Some debris is very visible, but falling debris from structures is also common and nails and other debris on the ground can also be dangerous and cause injuries.

After a major disaster buildings that appear unharmed from the exterior may be structurally unsound and dangerous. Buildings may have broken glass, falling panels and collapsed walkways and stairways. Utilities may be damaged. To learn more about these and other hazards please visit the website Are You Ready at the address shown here.

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Over the years experts have learned that wearing the right kind of gear in a disaster area is essential for safety. CERT members should wear their protective gear for safety in the after disaster environment. The gear includes a helmet, goggles, mask, gloves, reflective vest, and light. CERT workers are encouraged to wear work gloves to protect their hands from debris. CERT workers should also wear rubber gloves under their work gloves to protect themselves from contamination by fluids. By using this double gloving technique, CERT workers will be able to help the injured by simply removing their work gloves. CERT volunteers are also encouraged to purchase a pair of hard toed work boots.

Experts say it's important people wear all of their gear all of the time when they are working in a disaster area. It's important to wear the right gear and keep it together. People tend to wear pieces of gear, they have partial ensembles, they don't want to wear the whole thing. Unfortunately when you get out there and you cut your head open then you realize that you should have had your helmet on. Although some volunteers may be shy about wearing the gear at first, CERT's leaders have noted that most people will become accustomed to wearing it. It's important that they are comfortable because they are going to be in their gear during a disaster for long periods of time, they're going to have to be able to work in it, so initially they're a little hesitant and unfamiliar with their gear. By the end of our course and any CERT course they're very comfortable with working with the helmets and the gloves and the masks and things like that. CERT volunteers may also want to add to the standard equipment. Bring your backpack or go kit with you when you leave your house or apartment and also bring two bottles of water and any prescription medicine you take.

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Depending on where you live in the country, you should prepare for the kinds of potential disasters that are most common in your area. You should also have put together a disaster supply kit for your home, automobile, and work place. The disaster supply kit should include; water, food, medical supplies, first aid supplies, important documents and other basic supplies. If a disaster occurs take care of your own

home and family first. See what damage has been done to your home or apartment, and make sure everyone is safe before you venture out into your neighborhood and community. When you come out of your house you keep track of your own family members. It's not a good time to let the dog and the kids loose. You keep everybody where they're at until you find out what you're dealing with and you proceed carefully. Too many people go out and start sightseeing or they're overcome by the awesomeness of the event and they wind up becoming victims. We tend to be distracted when we see something very impressive like a disaster and we don't think and that makes us very vulnerable to getting hurt.

Check around your house for damage or other fallen debris. Next, if it is safe to do so, and appropriate, turn off the utilities. Check the house, and they're looking for gas and electrical issues and things of that nature, general safety. And if there is major devastation in your neighborhood literally draw a map of where you are and what your new neighborhood looks like before you venture out. Natural disasters tend to do great damage to the geography of an area. So the area that was very familiar to you around your home before can suddenly become completely alien. Once buildings are damaged, street signs are down, trees are down, familiar structures are gone, you can go a block or two from home and be lost and in fact that's what happened in Hurricane Andrew. People were lost in their own neighborhoods. Emergency service workers who do this for a living were lost. They couldn't find out where they were. So it's important to make a map so you can find your way home because you are in an unfamiliar area again.

Then, depending on the severity of the disaster, and your CERT's SOP, you should connect with your CERT team members and plan to meet. On the way assess the damage to your neighborhood and be ready to report what you've seen. The CERT teams are there to take the lead, they're there because they have been trained and they're in a perfect position to take the lead. And then you'll organize the CERT team into a workable unit. You'll decide if you're going to stay in your neighborhood or report to local first responders. You may be working with your CERT team members or with your neighbors. Hopefully if you have your group together, your neighborhood group, your CERT group together and you've pre-planned and pre-designated a team leader for that and you will meet with that team leader at a pre-designated position with your equipment that you've pre-planned and brought with you so that you can go out and do what you've been taught to do.

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There is no one formula for how a CERT team will organize itself or work together. Ideally the team will have organized itself previously, but because this is a volunteer group and because disasters are not planned events, the group membership may change. So CERT team members are urged to improvise, adapt, and overcome.

However the CERT team comes together, someone must serve as the leader. Once they mobilize their CERT team, they've put somebody in charge and it's up to that person to remain in charge and to give orders and without that it's going to be chaos. In some situations the CERT team member may become the leader in the neighborhood during a disaster. A good scenario would be let's say that there was no other CERT people around but you were the only person that was trained and you had to use other neighbors that had no training. You would automatically become the person that was in command because no one else knows what you're trying to do.

So they could utilize people that don't even have CERT training and be in charge and tell them what to do and tell them how to be safe, and we do stress that in the class as well, you know to utilize other people, utilize your neighbors, utilize people that haven't been there and it just gives you more hands, more people to help out in the situation. Everybody that takes a CERT program potentially could be a team leader. Now some people are more prone to do that and that's fine.

So team leaders are either pre-selected or selected at what we call the staging area to take a group or a team and perform a certain mission. It may be to help at the treatment area, it may be to do a search of a neighborhood, it may be to turn some utilities off, maybe even to fight a small fire with extinguishers. And though people sometimes are not confident about their abilities, experts say that everyone can play a role in these difficult situations. A lot of people will say to me, "I can't do this work, no one will listen to me."

When people are scared, when people have had something happen to them where they need help, maybe they don't tell you they need help, but you know they need help, people will respond to you as long as you're clear, as long as you are being understood by them, they'll listen to you and they'll allow you to guide them in certain directions. Will you run into speed bumps or difficulties along the way? Sure, but are there ways to overcome it? Improvise, adapt, overcome.

After the CERT team members meet together and become organized, wherever they go and whatever job they are doing they need to assist the situation they're in or do a size up. The size up is the same approach used by other first responders like firefighters to make sure that a systematic approach is used when dealing with a dangerous and unpredictable environment. The steps involved with the size up are: gather facts, assess and communicate the damage, consider probabilities, assess your own situation, establish priorities, make decisions, develop plans of action, take action, evaluate your progress.

Secondly we talk about size up and that's the idea that you look before you leap. You don't just rush into things, you go out, you look, you think your way through things. You're in an unfamiliar environment even if it's your own backyard so you go out and you pay attention. If you find someone who's injured it's wise to stop and look at why they got hurt before you rush in. For example, if someone was electrocuted, and you rush in to help them, you may wind up being a victim also. So the house that looks

normal, you walk in but there's a hole in the floor, the smell of gas, the sound of gas escaping into the enclosed area. You walk outside to take care of utilities and you can't.

This is a hazard, back away, put some tape up there, keep other people from it. There are always hazards to be alert of. Overhead wires, can they come down? Treat every wire like a live wire, move around it, tape it off or put a rope around it. There's always hazards, things change so we constantly look because things can shift, things can move. You have to size up your situation. That's the terminology we use. They do a good size up, they check out their scene before they go in, they don't want to rush into a situation cause we might have somebody let's say injured in a vehicle. But if there's an electric line across the vehicle then again we're going to have more patients, they're becoming a patient themselves, we don't want that. If you give a good size up before you start to act, and think before you go in there you have a better chance of staying safe. CERT team members are always encouraged to take care of themselves and be safe above all else.

Basically the instruction here to people is that as curious as you may be to see things, be very careful where you go. There is no reason to enter a damaged building unless something vital is going on there. Light damaged buildings should be entered very carefully, heavy damaged building should be avoided at all costs because of the danger involved there. There needs to be a reason why you stick your neck out.

There are situations like with electricity, people tend to believe that when the power is off from a disaster, it's off everywhere. We fail to understand that it is the power company's mission to keep power on, not keep power off. So many systems are developed into the grid systems to keep the power running. Well these can work against us when power goes out so we have to assume all lines are charged. There are many electrocutions after a disaster situation and so that's a big problem for us.

Seasoned first responders always work with a buddy and CERT team members are also strongly urged to follow this safety practice. And we teach the buddy system so you always want to have at least one other person there. And really that's for accountability issues. If God forbid, you and I are working and we're searching a building and I go in by myself, or we go in together, and something happens, there's no way that anyone would know that we need help. And it's really accountability and safety because we don't want to become part of the problem, we want to be part of the solution. Going off alone is a recipe for trouble so we advocate the use of the buddy system. Always being with somebody so that if something happens, somebody can go for help. Two pairs of eyes are always better than one. One person sees something that the other person doesn't see. The buddy system has always been there. We use it, everyone should use it.

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Although many people assume that all of the injuries or medical problems occur during a disaster, experts have found that in fact a large percentage of injuries and even deaths from a disaster have occurred after the disaster as inexperienced volunteers try to help out. Because disasters are such dynamic and unpredictable events, and because they can leave the environment in chaos, it is easy for volunteers and people who have been involved with the disaster to become injured.

You're going to see the things that you would typically see if you wandered through a construction site. We see things like nails through the feet, very common. Injuries from glass, lacerations to feet, a lot of hand lacerations, people reaching down and digging through things and getting cut on sharp metal and sharp objects. A surprising number of eye injuries and head lacerations because people don't really see, they look down but they don't look up and there's a lot of debris hanging down. We see a fair amount of injuries from power tools that people try to use that they're not used to. Chainsaws and cutting devices that they've never used before, they pull it out, they borrow it from a neighbor, they're going to cut up their tree and the next thing you know we've got another injury and you couple that with people often doing a lot of drinking at the same time afterwards and you've got kind of all the combinations you need there for definitely to have a disaster, a second disaster as it were.

In a disaster you can see everything from a patient with multiple fractures, abrasions, lacerations, and they can vary from minor abrasions to grotesque deformities. We see a lot of fractures after a disaster, those can be simple fractures with just a little bit of deformity to the extremity or the bone to actual bone ends protruding out of the skin. Major lacerations, as I said people work with a lot of tools, we see a lot of injuries, digits may be cut off, extremities may have severe lacerations. Those are probably some of the more grotesque injuries, electrical injuries occur quite often, electrocutions, those types of things. And we see some of the minor ones, people stepping on nails, minor lacerations, cutting themselves and those tend to be the majority of a lot of the things we see.

As a CERT volunteer, safety is your number one priority. To protect yourself from being injured you should wear the right protective gear, work with your buddy, follow correct procedures for a size up and always be aware of what is going on around you. Realize that the post-disaster environment has many hazards including debris on the ground and hanging overhead, airborne debris and dust that can get into eyes unprotected by goggles, sharp objects, live power lines, fallen tree limbs, contaminated water, and fires. You can also become injured from lifting heavy objects incorrectly or from bumping into overhead objects that have fallen. Respect your limits. Take frequent breaks and stop working if you're too tired or exhausted or over stressed. And drink plenty of water to stay hydrated and remember all of your training has been designed to keep you safe so you can help others.

Here are some injuries commonly occurring to workers in the post-disaster environment: dehydration, heat stroke, punctures to the feet caused by nails or debris, eye injuries, back injuries, sprained ankles, other sprains, injuries caused by falling debris, cuts, lacerations, bruises, concussions, head injuries. As a CERT team member you'll also give first aid or medical assistance to others who have been injured. Use

the skills you've practiced during the CERT training sessions. You're going to do what you're trained to do and we train you to deal with that if it's bleeding, you understand the ways to control that bleeding, and we teach you many different ways of bandaging injuries. We teach you how to deal with fractures and immobilize those fractures, you understand and we talk about that because there are issues there with blood borne pathogens and we want you to protect yourself because ultimately you need to take care of yourself and your buddy.

After a disaster has occurred the landscape changes. Homes and neighborhoods may be in shambles. The normal landmarks in the neighborhood may be gone and neighborhood animals may be homeless or traumatized. While neighbors and volunteers may want to take care of stray animals, experts issue a note of caution. When you come across an animal that's stressed out or traumatized, often times they're going to shy away from you, there's going to be a look of hesitation, and whenever you see that it's key to understand that that dog may bite out of fear or that animal may bite out of fear. Whenever an animal isn't walking right up to you friendly, I would suggest making sure that someone with the appropriate equipment is called in to handle that animal. If you see a stray dog or a cat, note where it is, a lot of times you're not going to have street signs and things of that nature but do the best that you can and report that information to the animal control authorities that are going to come into the area and start working. Animal control experts know from experience that it is best to be cautious when dealing with an animal that you don't know because after a disaster they may be traumatized and act out of fear.

What I would suggest is don't try and read the animal, just because its tail is wagging doesn't necessarily mean that it's happy and friendly. Most aggressive animals, police canines for example, you know whenever you see them being aggressive their tail is going to be up, their ears are going to be up, their tail will be wagging, all indications are you look at him from a distance, that looks like a happy dog. But you run into it you find out it's not as happy as you thought.

Good boy.

And if a cat or dog bites you it can be very serious. Animal bites are very serious. Typically you'll deal with dogs and cats, and any animal carries bacteria in its mouth. When it bites you the bacteria is put into your body. Cats carry a high rate of bacteria, infection can spread very quickly. Wildlife also. If you're bitten by a raccoon you're trying to help you could get rabies or you have to go through a series of rabies shots.

Volunteers may also find animals that have been injured during the disaster. While your instinct may be to help the animal immediately, experts again urge caution. So often you deal with an injured animal, they're in that self-preservation mode. They do not think that you're there to offer them help. They think of you as being somebody that's going to take advantage of them, like another predator would. So

consequently they bite or scratch or whatever it takes to defend themselves. So I highly recommend that if you come across an animal that's injured, make sure that you turn it over to the proper authorities. Don't try to handle it on your own because it really does require specialized equipment.

If you do find the neighbor's dog, make sure you give the animal control officers the owner's name and address and other contact information. But besides homeless dogs and cats experts also caution about other creatures that may be displaced during a disaster. You can expect that after a disaster that everything in that area is going to be displaced in one way or another and you know you've got a lot of water issues so you're going to have tidal flow that may bring animals from a different area into your area that you wouldn't normally see, so whenever you're doing any type of work you've always got to keep it in mind that there could be a venomous snake, you know underneath that piece of garbage that you take for granted as being there's no harm here. So yes, you definitely have to be on the look out for things that might not normally be there. After a disaster you can also expect that animal control officers from throughout the state will volunteer their time. You may also work with a variety of rescue groups that are helping to place animals in shelters while they wait for their owners to return.

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Disasters bring challenges to any community. As the professionals know they are unpredictable, they tax resources, and they change lives. As a CERT volunteer you've been introduced to strategies and techniques that can help your neighbors and your community. The best thing you can do to prepare for a disaster is train, train, and then train some more. CERT teams are trained to do just what we do and they're trained very well. We share with them just about everything we know relative to the business to help them be able to do that job. And so remember that you've been introduced to some basics of disaster management and that you can contribute during these unexpected times.

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