

# Hurricane volunteer crew safety

*Prepared by Ken Wells, President – Lifeline Strategies, LLC*

In the aftermath of Hurricane Harvey, an army of volunteers are pitching in to help with the recovery. The victims are certainly grateful and the more volunteers the better.

There are hazards to working in flooded out homes, however. In every disaster, there are a few accidents that strike volunteers and work crews. While few, these accidents can become major problems in communities where normal medical care is hard to find and medical personnel are extremely busy. Fortunately, with a little caution, most of the threats can be avoided.

Here is a simple guide for volunteers helping with the Harvey recovery efforts.

## **Before you work**

**Tetanus Shots** - It is a good idea to stay up on your tetanus shots no matter what you are doing, but when doing recovery work, it is even more important.

**Safety Walk Through** – Each crew should have a chief, and the chief should walk through the house or apartment before anyone gets to work. Here’s what to look for:

1. What hazards are present?
2. What are the first priority projects?
3. How should the volunteers be assigned when the work starts?

It is a good idea to start every job with a Safety Brief. The chief should remind volunteers of general safety concerns when they are working and notify them of any specific hazards. Don’t assume that your crew doesn’t need this if they have some experience. On most professional construction and other industry jobs, the work crew starts with a safety brief at the beginning of every day. It is the best way you can make sure everyone’s head is in the game before they go to work.

## **Protective Equipment**

In a disaster, personal protective equipment may be hard to find, but here are some considerations.

**Gloves** – For tear-out work, make sure gloves have solid, cut-resistant palms. If working with mold, use chemical-resistant, disposable gloves.

**Footwear** – Steel-toed or a composite material that protects your toes are best. If you do not have them, continually be aware that you have no protection and need to step very carefully.

**Masks** – For normal dust, use a face mask, preferably an N-95 filtering facepiece to keep from inhaling particulates. However, if mold has set in, recognize that a simple facemask may not be enough. When you place the mask on over your mouth and nose, use two hands to make sure the centerpiece fits snugly on the bridge of your nose.

**Safety glasses or goggles** – If they are available, use them. Ripping out sheetrock or trim can cause splinters or small chunks of material to fly at your eyes. If much mold is present, OSHA recommends non-vented goggles.

## General Awareness

**Focus on what you are doing** – Most accidents happen when we are not mentally engaged in the task we are performing, most often because we are complacent, distracted or unsure of how to perform the task. This becomes even more critical in the heat of the day, when everyone is tired.

**Focus on what is going on around you** – It is also important to be aware of what other people are doing nearby. Be aware of the potential hazards that are around you and may not be related to your task. Is someone using a saw or swinging a hammer? Are any walls or ceiling tiles unstable and at risk of falling?

## Hazards

While cleanup efforts are generally safe, there are certain hazards that you need to be aware of and prepare for:

**Heat** – Heat stress and other illnesses can be deadly and many symptoms don't occur until the victim has passed the danger point. Above all, keep an eye on co-workers and don't be shy about asking them if they need a break, to sit down or to rehydrate. Drink plenty of water or other hydrating liquids **before** you feel thirsty. As the heat index climbs above 90 degrees, OSHA recommends drinking about four cups of water an hour. Above 103 on the heat index, take water breaks every 20 minutes. Avoid energy drinks – they are loaded with caffeine and can create more problems than they solve.

**Dust** – Wear your mask! Dust is everywhere. As the silt from flooding dries, it becomes a fine particulate that can easily become airborne. That means you are breathing whatever nastiness was in the flood waters in the area you are cleaning up. Sheet rock is made of gypsum and produces a lot of dust when it is broken. Gypsum is not a particular hazard, but any dust can be an irritant. Enough exposure can cause irritation in the lungs and can make other allergic reactions or asthma worse.

**Mold** – Within a few days of the flood, mold becomes a serious problem. At the very least, it can trigger allergies and sinus problems. Repeated exposure can cause much more severe reactions, including chronic sinusitis and other long-term problems. People with respiratory problems or heart conditions and children should stay away from working on moldy homes. Everyone else needs to make sure they wear their respiratory protection.

**Electricity** – Never work in standing water if electricity is present. Once the water has gone away, you still need to be careful, especially when tearing out walls. Home wiring is usually run on the inside of dry wall, meaning anyone working with a saw or cutting tool could potentially cut into a wire. Generally, try to cut the power to any room while dry wall or woodwork is being removed.

**Being struck by objects** – One of the most welcome sights in a flooded neighborhood is when a lot of volunteers show up at once. However, a crowd of volunteers, eager to help, but lacking experience, can get in each other's way. It is not uncommon for someone hauling long boards or other trash out of a house to hit someone who is working in a hallway or other common area. It is also not unheard of when pulling out paneling or other building material to have it crash down on someone's head. It is all avoidable, but volunteers need to always be aware of the people working around them.

**Nails and other sharp objects** – The deeper an area gets into recovery, the more of a problem nails become. They are everywhere and, if the floor is covered with debris, nails are impossible to see. Remember, most people are wearing nothing more than sneakers and have no protection. That's why a volunteer needs to be assigned the job of getting the trash off the floor and sweeping up.

**Critters** – Insects and animals seek shelter after storms. That means you are very likely to find them in houses. Keep an eye out for spiders, fire ants and other insects. Watch where you reach. The noise that volunteer groups make will generally warn rats, possums and other nuisance animals to get out of your way before you start work. However, depending on the housing and area, you may also find any number of stowaways hiding behind the dry wall when you knock it out. It doesn't hurt to bang the wall a few times with a hammer before you start.

**Slips and Falls** – Every house you work in is likely to have had water in it. The floors may still be wet. They will definitely be covered with a film of mud, which becomes slick as soon as it gets wet. Stepping on carpet or outside mud will quickly make the floors a slippery mess. Step carefully and slowly. Avoid climbing on top of counters to reach belongings unless someone is there to spot you.

**Pollution** – Take this seriously. Flood waters are like a giant blender. Any toxins, bacteria, mold or other harmful material that was upstream or around the house probably got into the house. You have no way of knowing if it is in dangerous concentrations. Early reports indicated that fecal coliform levels were through the roof in some areas. Add to that lawn pesticides, and backed up sewage. Wear your mask. Don't rub your eyes with your hands. Wash your hands and arms as often as possible. Avoid exposing any cuts to mud or other contaminated material and, if you do get a cut, treat it right away.

None of this is meant to scare anyone from volunteering. It is much needed and assisting others in their time of need helps the helper as much as the people who are helped. But the best way to make sure the experience is a good one is to follow some simple safety rules.

*Ken Wells is the President of Lifeline Strategies, a safety and communications consulting business in Kingwood, TX. If you would like more information and resources on recovery safety, contact [info@lifelinestrategies.com](mailto:info@lifelinestrategies.com).*