STRATEGIC OUTCOMES PRACTICE



YOU SHOULD KNOW

March 2010 - Issue 12 www.willis.com



POST-FLOOD HEALTH AND SAFETY ISSUES

By Brad Barraclough, ARM, ALCM

By February, we start looking forward to spring, except perhaps if you're in a place such as Seattle's Green River Valley, where spring floods are a serious threat.

Green River Valley residents and businesses are keeping a close watch on the Howard A. Hanson Dam, whose structural problems have limited the dam's flood control capacity.

In places with less dramatic flood control challenges, spring rains and runoff can still be a major exposure. For businesses at risk, now is the time to identify, communicate and rehearse the steps needed to mitigate flood damage and enhance the safety of your employees. Key initial actions include:

- Printing maps of the main and alternate evacuation routes from your business site
- Providing employees with copies of the route maps that they can keep in their vehicles
- Practicing the company evacuation plan
- Encouraging employees to create and keep a 72-hour preparedness kit in their vehicles (refer to www.redcross.org for additional information)

Any organization with facilities near a body of water that can possibly overflow its banks should be aware of what to do before, during and after a flood. We focus here on the aftermath, and what you need to know to conduct a safe, swift and effective cleanup. Some business owners, anxious to resume business activities as quickly as possible after a flood, will not even wait until the water has receded completely from their sites to begin cleanup. The cleanup efforts, however, can pose safety and health risks for those involved. The following information and tips have been compiled from governmental and safety industry sources.

SAFETY FIRST

During and immediately after active flooding, employees need to stay in a safe location and await word from official sources that it is safe to reenter the work area. Never attempt to drive a vehicle through flood water, no matter how shallow it appears and no matter how well you know the road. Such attempts are a leading cause of flood-related injury and death. Do not bypass road barricades or drive on roadways that show evidence of damage or roadside erosion.

The EPA cautions about the potential hazards of flood waters. Every effort should be made to limit contact with flood water due to potentially

This issue of You Should Know is one in a series of brief articles designed to keep our clients abreast of significant breaking news in the claim and loss control areas that could affect their operations or exposures.

Additional information about this and other topics can be obtained from your Regional Strategic Outcomes Practice Associate.



elevated levels of contamination from raw sewage and other hazardous substances. Practicing basic hygiene during the emergency period is crucial. Always wash hands with soap and use water that has been boiled or disinfected, or use hand sanitizing products. If you have any open cuts or sores that will be exposed to flood water, keep them as clean as possible by washing well with soap after every contact with the flood water. If a wound develops redness, swelling or oozing, seek immediate medical attention. Everyone involved in the cleanup should have current tetanus shots. Wash all clothes worn during the cleanup in hot water and detergent, and wash them separately from uncontaminated clothes and linens.

Individuals involved in the cleanup should wear appropriate personal protective equipment, such as gloves, eye protection, N-95 respirators and rubber boots. Other protective clothing or equipment should be worn as needed depending on the cleanup task.

REENTERING BUILDINGS AND STRUCTURES

Before entering any flood-damaged structure, a qualified individual should determine that it is safe to enter. Qualified professionals should determine the need to and the safest means of turning off the electrical, gas and water utilities in the building. They must ensure that the utilities pose no threat before employees enter the building to begin cleanup. Cleanup teams should be aware that during power outages a sudden restoration of power could create electrical hazards in the building. Never power up equipment that was exposed to water until it has been inspected by a qualified professional.

Do not allow smoking or other ignition sources in the building. Use flashlights. Never use fueled camping lanterns for light. If a gas leak is suspected, leave the building, get to a safe distance and contact the gas company.

GENERATORS AND GASOLINE-POWERED PORTABLE LIGHTING

Exhaust from generators and gasoline-powered portable lights can be toxic. Always set up generators/lighting outside, well away from doors, windows and vents. Never use this equipment inside

buildings, homes, garages, crawlspaces, sheds or other enclosed areas. Any fuel-burning device, such as a pressure washer, can produce carbon monoxide and should not be used indoors. Carbon monoxide (CO) is deadly. It can build up quickly and linger for hours. When using a generator to provide temporary electrical power, use only properly rated, heavy duty electrical extension cords protected by a ground fault circuit interrupter.

DEBRIS AND BUILDING MATERIALS

When handling building materials, exercise caution to prevent injury. Building materials may contain hazardous substances, such as asbestos, that, when airborne and inhaled, can be detrimental to health. Any material that could contain asbestos should not be disturbed. Debris can also contain sharp metal edges, pieces of glass and nails. All hazardous materials should be removed by qualified professionals using proper personal protective equipment and disposal methods.

HAZARDOUS CHEMICAL SAFETY

Disinfectants, sanitizers and other cleaning solutions can be toxic and potentially hazardous. Always wear appropriate personal protective equipment and follow the recommendations on the product's Material Safety Data Sheet (MSDS). Mixing certain types of cleaners and disinfectants can produce toxic fumes and result in injury, or even death. Do not mix them or use them in combination. Read and follow all label instructions carefully. Where necessary provide fresh air by opening windows and doors and limit time that employees remain inside of a building with cleaning chemicals.

OTHER SAFETY CONSIDERATIONS

Standing water is a breeding ground for a wide range of microorganisms and insects, including mosquitoes. Mosquitoes can spread such diseases as West Nile virus and encephalitis. Microorganisms, including bacteria and mold, can become airborne and be inhaled. Where floodwater stands for an extended length of time, contamination with infectious agents is a concern. Remove standing water as quickly as possible and limit exposure to areas with static contaminated water. If mosquitoes are present, use personal protective clothing and insect repellant.

Cleanup work will involve varying degrees of physical effort. Some employees might not be suited for heavy manual tasks. Exercise judgment when assigning tasks to employees to help avoid injuries. OSHA rules and safety practices and programs must be followed during all aspects of this process. Short-cuts should not be allowed to expedite the cleanup effort. Only trained employees should operate equipment such as fork-lifts and power tools. Follow all rules associated with confined spaces. Safety is your top priority.

ADDITIONAL INFORMATION

Useful links for additional information:

You Should Know – Potential Flood Crisis for Seattle's Green River Valley

http://emergency.cdc.gov/disasters/floods/after.asp

http://www.fema.gov/hazard/flood/fl_after.shtm

http://www.osha.gov/OshDoc/flood-tornado-recovery.html

http://www.redcross.org

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