



# Information for CSEA Members Responding to Flood Affected Areas

Floodwater often contains infectious organisms such as E. Coli, Salmonella, Hepatitis A Virus and agents of typhoid and tetanus. Floodwater may also contain hazardous chemicals and sewage. The signs and symptoms most experienced with these exposures are headache, nausea, vomiting, diarrhea, abdominal cramps, muscle aches, fever and fatigue. Symptoms can appear immediately or weeks after the exposure.

## General Hazards

When working in areas that have been flooded, assume these hazards are present, in addition to those you normally encounter (for example operating chain saws and chippers; working around heavy equipment; temporary traffic control plans; etc.):

- Assume all water is contaminated (with sewage and chemicals),
- Watch for downed electrical lines, and
- Assume all building debris is contaminated (with asbestos, lead and mold).

**An emergency situation does not override normal safety procedures; these precautions should be taken in *addition* to them!**

## Personal Protective Equipment (PPE)

*Your employer should provide the following, as needed:*

- ✓ Where **working with debris**, wear protective-toed boots with puncture resistant soles.
- ✓ If you will be in an area that has **standing water wear knee high**, rubber, over boots to keep your work boots dry.
- ✓ Where you could be **splashed with contaminated water** wear rain gear or water proof coveralls. Wear ANSI approved protective eyewear with wrap around protection or side shields. Make sure you have glasses for when you will be working, which may mean a pair for low light conditions (clear or amber) and darker for daylight.
- ✓ Where you could be **splashed in the face** wear goggles and a face shield.
- ✓ If **handling debris** wear cut and puncture resistant gloves.
- ✓ If **working with wet materials** wear forearm length, thicker, rubber gloves.
- ✓ If there's **danger of falling debris**, wear an ANSI approved hard hat.
- ✓ If you are **working around noisy equipment** wear ear muffs or inserts.

**Wear only the PPE you need, as more clothing will cause heat stress.**

## Respirators

Your employer must qualify you to wear a respirator. This means you have been medically evaluated, fit-tested and trained. If wearing a respirator to prevent irritation, your employer must review of Appendix D of the OSHA respirator standard with you. For handling debris where dust is generated, at a minimum, wear a NIOSH approved N95 respirator. If you have a rubber face piece respirator, make sure it has filters for particulates.

## Decontamination

Wash any PPE and equipment that come in contact with flood water or debris with warm soapy water and rinse with clean water, unless your employer tells you to throw it out. Proper PPE will protect your work clothes. If your work boots have contacted flood water or debris, remove them before getting in your car and keep them in a plastic bag until they can be cleaned or replaced.

# Other Important Considerations

## Personal Hygiene

Wash your hands and face often and, at least, before eating, drinking, smoking, or using the bathroom. If clean wash water is not available, use packaged cleaning cloths (baby wipes). Remove your work clothes outside your home and shower as soon as you get inside. Wash your work clothes separately from your family's clothes, running the washer with bleach after washing work clothing.

## First Aid

Be sure you have a first aid kit and a way to call for help (a radio or cell phone). Clean cuts and abrasions immediately with soap and water, then apply antibiotic ointment and a clean bandage. Report all injuries to your employer, no matter how small. If you get cut, check to see when you last had a tetanus shot.

## Heat Stress

Drink lots of cool water or a mix of  $\frac{1}{2}$  sports drink &  $\frac{1}{2}$  water. Avoid soda, alcohol, coffee and tea as these will dehydrate you. During hot weather, if possible, do the heaviest work early in the morning 6:00 AM-11:00 am and later in the afternoon 3:00 PM- 7:00 pm. Take frequent rest breaks. Eat light meals. Avoid direct sun. Monitor co-workers for the signs of heat stress.

## Damaged Electrical Lines

Never enter standing water unless you know that there are no downed electrical lines in the area. If you see a downed or hanging electrical line always assume it is energized. Do not approach it as the electricity can be traveling through the ground. Keep everyone clear and have someone call the utility company emergency number. Keep the people away until the utility arrives to take control of the area.

## Natural Gas Odor

If you smell the odorant added to natural gas cease all work and slowly leave the area. Shut down any vehicles and do not perform any activities that could cause a spark. Move upwind and uphill if possible. When out of the area of the odor call the utility company emergency number. Keep the people away until the utility arrives to take control of the area.

## Confined Spaces and Trenches

All safe entry procedures must be followed when entering permit required confined spaces (such as sewers and vaults) and trenches. Trench cave-ins are more likely to occur when water has collected. Confined spaces and trenches must be cleared of standing water.

**Notify your supervisor if you have any health or medical conditions, such as high blood pressure; heart or respiratory condition; or insect, plant or mold allergies.**