



TAILGATE SAFETY

WET CEMENT – HAZARDOUS EXPOSURES

Among concrete workers, the most common skin ailments are dry skin, irritant and allergic contact dermatitis, and cement burns. Symptoms of injured skin can include, but are not limited to:

- Redness
- Blisters
- Scaling
- Itching
- Burning
- Bumps
- Bleeding
- Rash

Cement burns can produce blisters, dead or hardened skin, or ulcerations that can take several months to heal and may need skin grafting. If you get a cement burn, or are suffering from exposure to cement, notify your supervisor or management immediately. Treatment for cement burns must begin as soon as possible. A cement burn can continue to get worse even after you have rinsed off the cement. Within 12 to 48 hours after skin contact (after one to six-hour exposures, first, second, or third degree burns may occur.

The pH (alkali level) of wet cement is 1 billion times higher than the pH of your skin. The alkali level of you skin will increase when exposed to wet cement. At a higher pH level, skin becomes more permeable and absorbs more chemicals. Higher alkalinity can also encourage bacterial growth, causing infections that worsen skin problems. Alkali is a caustic (corrosive) material and has an irritating effect on living tissue. Like acids, alkalies burn skin, but the burn caused by alkali damages the skin slowly.

Material Safety Data Sheets should always be reviewed to identify the pH level and potential hazards associated with the cement being used. It is mandatory that Personal Protective Equipment (PPE) is worn when working with wet cement. Required PPE includes:

- Water/chemical-proof gloves.
- Long-sleeved shirts and full-length pants
- Tight-fitting eye protection
- If you have to stand in wet concrete, use waterproof boots that are tight at the tops and high enough to keep concrete from flowing into them.
- When finishing concrete, wear knee pads to protect knees.

For washing cement off skin, use a pH neutral soap to neutralize the alkalinity of the cement. Use clean running water, if possible, or use multiple rinse buckets. Barrier creams should be avoided.

If wet cement or hardened concrete dust gets in the eyes, gently lift the eyelids and flush immediately and continuously with flooding amounts of water for a minimum of fifteen minutes.

Indirect contact through clothing can be as serious as direct contact, so promptly rinse out wet concrete, mortar, cement or cement mixtures from clothing.

