# Concrete Burns Meeting Kit


## WHAT’S AT STAKE

**Concrete Burns Safety Talk**

Concrete work is usually hard physical labor that presents many different hazards for the individuals who work in this field. While there needs to be a steady or even fast pace at times, it is important to take the time to recognize the hazards of the work and mitigate them. A common hazard that needs to be discussed and addressed when working with concrete is concrete burns (also called cement burns).

## WHAT’ S THE DANGER

**AT RISK**

Any employee who has skin contact with wet portland cement has the potential to develop cement-related skin problems. Portland cement is an ingredient in concrete, mortar, plaster, grout, stucco, terrazzo.

**SKIN IRRITATION**

Irritation is caused by the skin’s exposure to concrete and, more specifically, its aggregate material makeup.

**CONCRETE BURNS – CAUSES**

Once concrete starts hardening, burns can form slowly over hours or days. That’s because, in order for concrete to harden, it has to absorb moisture, drawing water away from anything that holds moisture—even wet clothing and skin—which only aids in the drying process.

If hardened concrete is left untreated on the skin, skin begins to blister, swell, and bleed, leading to first-, second-, and even third-degree burns following soon after. Severe cases of concrete skin irritation can lead to permanent scarring and even require skin grafts or amputations.

**DERMATITIS – CAUSES**

Prolonged exposure to wet cement can make you susceptible to Irritant Contact Dermatitis (ICD). ICD will cause the skin to itch, scab, and become red or swollen. Multiple ICD experiences can lead to Allergic Contact Dermatitis (ACD), a long-term sensitivity to the chemicals in cement.

# HOW TO PROTECT YOURSELF

**PREVENT CEMENT – RELATED SKIN PROBLEMS**

The best way to prevent cement-related skin problems is to minimize skin contact with wet portland cement.

**Good Practices for Glove Selection and Use**

- Provide the proper gloves for employees who may come into contact with wet portland cement.
- Use only well-fitting gloves. Loose-fitting gloves let cement in. Often the use of gloves and clothing makes exposure worse when cement gets inside or soaks through the garment. Use glove liners for added comfort.
- Wash your hands before putting on gloves. Wash your hands every time that you remove your gloves.
- Dry your hands with a clean cloth or paper towel before putting on gloves.
- Protect your arms and hands by wearing a long sleeve shirt with the sleeves duct-taped to your gloves to prevent wet cement from getting inside the gloves.
- Follow proper procedures for removing gloves, whether reusing or disposing them.
- Clean reusable gloves after use. Before removing gloves, clean the outside by rinsing or wiping off any wet cement.
- Throw out grossly contaminated or worn-out gloves.
- Keep the inside of gloves clean and dry.
- Do not use barrier creams or “invisible gloves.” These products are not effective in protecting the skin from portland cement hazards.

**Good Practices for Use of Boots and Other Protective Clothing and Equipment**

- Wear waterproof boots when necessary to prevent wet cement from coming into contact with your skin.
- Boots need to be high enough to prevent wet cement from getting inside.
- Select boots that are sturdy, strong enough to resist punctures and tears, and slip resistant.
- Change protective boots if they become ineffective or contaminated on the inside with wet cement while in use.
- Change out of any work clothes that become contaminated with wet cement and keep contaminated work clothes separate from your street clothes.
- When kneeling on wet cement use waterproof kneepads or dry kneeboards to prevent the knees from coming into contact with the cement.
- Wear proper eye protection when working with Portland cement.

**Good Practices for Skin Care**

- Wash areas of the skin that come into contact with wet cement in clean, cool water. Use a pH-neutral or slightly acidic soap.
- Consider using a mildly acidic solution such as diluted vinegar or a

buffering solution to neutralize caustic residues of cement on the skin.
- Do not wash with abrasives or waterless hand cleaners, such as alcohol-based gels or citrus cleaners.
- Avoid wearing watches and rings at work since wet cement can collect under such items.
- Do not use lanolin, petroleum jelly, or other skin softening products.

## FINAL WORD

Working with concrete comes with many hazards. Concrete burns can strike an unprepared worker quickly. Take the necessary steps to protect your skin from the harmful burns wet concrete can cause.