

NRMCA Monthly Safety Initiative

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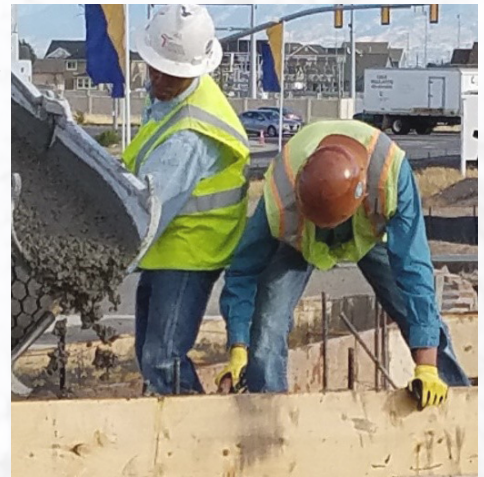
Cement Burns

Ready Mixed Concrete and Cement Burns

About 10% of ready mixed concrete is made up of portland cement. Those who work with portland cement are at risk of developing skin problems, ranging from mild and brief to severe and chronic. Wet portland cement can damage the skin because it is caustic, abrasive, and absorbs moisture. Portland cement also contains trace amounts of hexavalent chromium [Cr(VI)], a toxin harmful to the skin. Dry portland cement is less hazardous to the skin because it is not as caustic as wet cement. Wet portland cement in concrete can cause caustic burns, sometimes referred to as cement burns. Cement burns may result in blisters, dead or hardened skin, or black or green skin. In severe cases, these burns may extend to the bone and cause disfiguring scars or disability.

What to Know About Cement Burns

Employees and customers of the concrete industry need to be aware of the potential for cement burns if working with wet concrete. While handling wet concrete, any exposed skin having the potential to come into contact with the wet concrete, should be protected by being covered or use of proper personal protective equipment (PPE). Proper PPE for handling wet concrete includes hard hat, safety vest, long chemical resistant/waterproof gloves, long sleeve shirt, long pants (no cuffs), chemical resistant/waterproof boots, eye protection (with side shields), and waterproof knee pads if kneeling. As well, remember to remove jewelry such as rings and watches because wet concrete can collect under them. Clothing contaminated by wet concrete should be immediately removed. Any skin that comes in contact with wet concrete or contaminated clothing/PPE should be washed with fresh water immediately. Do not wash hands with water from buckets used for cleaning. Make sure plenty of fresh water is available in case wet concrete comes into contact with anyone's skin. Precautions should be taken before and during work with wet concrete as one may not feel the initial stages (pain) of cement burns until it is too late. Always remember to keep children away from the wet concrete.



Cement Burns: What to Remember

- Think first, use proper PPE at all times
- Relay cement burn hazards to employees and customers
- Reinforce proper PPE wear and care
- Reassess PPE after handling wet concrete
- Have plenty of fresh water available and pH neutral soap
- Immediately and thoroughly wash with fresh water any contacted skin
- Notify a supervisor if any cement burn precautions are not being followed
- Keep children away from wet concrete

Resources

OSHA: [Preventing Skin Problems from Working with Portland Cement](#)

NRMCA: [Cement Burn Prevention Program](#)

NRMCA: [Cement Safety Brochure](#)

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