

# Cement Burns



## WHAT'S AT STAKE

Wet cement is a leading cause of skin problems for workers. These problems can be mild and short lived or severe and chronic. Cement burns often go unreported, but can result in loss of income due to lost work time.

## WHAT'S THE DANGER

Cement, often known as Portland cement, is used in a variety of building materials, and can be harmful to the skin in several different ways. Contact with wet cement can cause chemical burns to the skin, which can result in blisters, dead or hardened skin, or skin that turns black or green. Often, by the time the pain from these burns has been recognized by a worker, the damage to the skin has already been done.

Skin contact with wet Portland cement can cause inflammation of the skin, referred to as non allergic contact dermatitis. Signs and symptoms of this dermatitis can include itching, redness, swelling, blisters, scaling and other changes in the normal condition of the skin. This damage is related to the caustic, abrasive and drying properties of Portland cement.

In addition, Portland cement contains Chromium VI (Cr(VI)) that causes an allergic form of dermatitis (allergic contact dermatitis) in employees who work with wet Portland cement and become sensitized. A sensitized person's immune system can overreact to small amounts of Cr(VI), leading to severe inflammatory reactions when re-exposed. Sensitization may result from a single Cr(VI) exposure, from repeated exposures over the course of months or years, or it may not occur at all. After an employee becomes sensitized, brief skin contact with very small amounts of Cr(VI) can cause a form of dermatitis.

## HOW TO PROTECT YOURSELF

The best way to protect yourself from cement burns and dermatitis is to limit your contact with wet cement, use personal protective equipment, frequently wash your hands and face, and know the rules that govern exposure to wet cement. You should also become familiar with the hazard communication program at your workplace, learn the safety requirements for dealing with wet cement and learn the regulations for working with wet cement.

## **FINAL WORD**

Cement exposure can cause acute or chronic skin damage that can result in lost work time and lost income. Use personal protective equipment and know the safety requirements for dealing with cement.