



# Concrete Burns

## Causes

- The cause of concrete burns is quite simple: direct skin contact with wet concrete.
- When water is added to dry concrete mix, one of the substances formed makes it highly alkaline, with a pH of 12-13. The natural pH of skin is around 5.5. The alkalinity of wet cement is what can cause a chemical burn on your skin.
- The effects of skin contact with wet concrete may not be felt initially as the reaction happens slowly. However, if not dealt with quickly, the chemicals can cause skin irritation, pain, blistering, and burns.
- In addition to the alkalinity of concrete, wet cement has other irritating properties such as abrasiveness and moisture absorption. That combination can result in the allergic reaction dermatitis which is identified from itchy, dry, painful and potentially swollen and blistered skin.

## Prevention

- Wear the appropriate PPE to prevent direct contact with your skin and eyes. This includes safety glasses, gloves, unripped pants, and rubber boots with no holes.
- Educate employees in the hazards and safety procedures for working with wet concrete.

## Treatment

- Immediate treatment of the affected area is key to dealing with the onset of concrete burns. **Do not wait to treat an area if you begin to feel any symptoms.**
- Remove any clothing which has gotten wet concrete on it for rinsing and cleaning.
- Wash the affected area of skin thoroughly with cool, clean water if possible.
- Then apply vinegar to the affected area of skin to neutralize the alkalinity. Each job trailer on concrete jobs has a jug of vinegar and a spray bottle. Ask the foreman onsite if not aware of its location.
- Fill out an injury report and notify your immediate supervisor as soon as possible.
- Seek medical attention if the above steps do not work or your eyes have come in contact with wet concrete.