

Prevention of Cement Burns

Factsheet

- Cement powder is alkaline in nature (pH of 12 to 13) which makes it harmful or caustic to the skin causing a chemical burn. Chemical burns are the 4th most common burns in adults*
- When cement is dry it contains calcium oxide, which is not particularly dangerous. However, when water is added to cement, calcium hydroxide is formed, which is extremely alkaline.
- Cement absorbs water (hygroscopic). It will draw water from any material it contacts, including skin. Cement combines with sweat and continues to destroy the tissue as long as it is in contact with the skin.
- Cement powder can penetrate clothing.
- Pain and burning sensation do not occur immediately.

*Data obtained from Burns Registry of Australia and New Zealand (BRANZ) 2020



- ✓ Do wear appropriate Personal Protective Equipment (PPE).
- ✓ Do wear waterproof gloves when handling or placing concrete.
- ✓ Do wear long pants and long shirts.
- ✓ Do remove affected clothing and quickly rinse clothes in clean water.
- ✓ Do gently brush any dry chemicals off the skin.

- ✗ Do not get wet cement inside your gloves or boots.
- ✗ Do not allow protective clothing to become saturated with moisture.
- ✗ Do not ignore cement splashes to the clothes or skin.

First Aid for Cement Burns

- Take gumboots/clothing off. Wash self-down with water, dry and change clothing.
- Run clean running water over the affected area immediately, for at least **60 minutes**

First Aid for Burns

If you, or someone you know is burnt, take the following actions:

1. Remove clothing and jewellery
2. Apply cool running water to the burn for **20 minutes** (effective up to 3 hours after injury)

Spraying water or alternating wet cloths can help if limited water
If no water available a hydrogel burn first aid dressing can be used until water available. Caution use on large %TBSA due to hypothermia

Do NOT use ice, butter, creams or alternatives

3. Cover burn with clean cloth and keep the patient warm
4. Seek medical attention for any burn bigger than 3cm; or with blisters; or if any other concerns

