


Safety Bulletin for concrete burns

New Zealand May 2022

Overview	What happens
<p>Concrete is commonly used across the construction industry and is often not considered a particularly dangerous substance or used with caution.</p> <p>When working around fresh, wet concrete people recognise there is always the potential for concrete to come into direct contact with your skin and eyes. But what most people overlook is the hidden risks to anyone who works with, or around these materials.</p> <p>Concrete is an extremely alkaline substance and prolonged exposure to wet concrete, especially on broken skin, including contact with eyes, can cause chemical (caustic) burns and other long term effects.</p> <p>The abrasive nature of concrete can further contribute to the potential for skin damage. Specialist medical treatment following exposure may be required – the foreign material (that permeates the skin) must be physically removed from the wound to prevent further damage, which can continue long after the initial exposure with this type of burn.</p>	<p>Sand contained in fresh concrete is abrasive to bare skin, the cement is alkaline in nature, so wet, caustic concrete and other cement mixtures have a pH level of 12 to 13. Strong alkaline bases, like strong acids, are harmful to the skin. Lime in concrete can cause serious burns, the combination of wetness, chemical corrosiveness and abrasiveness can result in dermatitis.</p> <p>Irritant or contact dermatitis can result from the combination of wetness, chemical corrosiveness and the abrasiveness of concrete. Repeat exposure of concrete to bare skin can result in allergic dermatitis.</p> <p>Allergic dermatitis is when you become sensitized to concrete, meaning that any on your skin will have an allergic reaction, which can continue long after the initial exposure.</p>
	What should I do
<h3>Examples of concrete burns to feet</h3> 	<h3>How can I minimise my risk</h3> <ul style="list-style-type: none"> • Always wear appropriate Personal Protective Equipment (PPE). • Wear waterproof gloves when handling or placing concrete. • Avoid getting wet concrete inside of gloves or boots. • Wear a long sleeve shirt and full length pants. • Wear rubber boots when standing in concrete. • Wear appropriate safety eye wear.