

# Doc's ice challenge warning

Comments on drinking a distraction says specialist who studied effects of cold water

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**T**he Ice Water Challenge, where participants are doused with a bucket of ice cold water, is potentially fatal – even without alcohol, a doctor warns.

Former neonatal paediatrician Dr Stephen Wealthall wants the social media game, aimed at raising money for charity, to stop before someone else dies.

Northland man Willis Tepania, 40, died on July 7 after going into cardiac arrest following the challenge, in which ice water was poured over his head before he drank a bottle of bourbon.

But Dr Wealthall, who has studied the sudden exposure of the head and face to cold water, believed Mr Tepania's heart attack was likely triggered by the challenge and said alcohol was a distraction to the debate.

"The throwing of cold water unexpectedly over the face and head is an extreme danger."

It invoked the airway protective reflex which closed the larynx, slowing the heart rate and causing a person to stop breathing, he said.

"There is a chance that some people will react very badly and that someone will die, and it might not be immediately."

In most cases normal breathing resumed when the person re-emerged from the water but in rare situations it could cause an "inappropriate" reflex, known as the "diving reflex".

"It might set up a stage where someone who already has rotten coronary arteries is short of oxygen, and a lot of heart attacks happen gradually and they don't necessarily have pain."

Dr Wealthall studied exposure to ice cold water as a British Navy cadet doctor in the 1960s and found some of the fit, young volunteers who jumped head first into icy water had to be hauled out and resuscitated.

He said the phenomenon was highlighted again in the 1980s when it was thought babies could learn to

## Ice Water Challenge

- A social media craze in which participants are doused with a bucket of ice cold water.
- Raises money for cancer charities but has been linked with heavy drinking.
- Unexpected cold water on the face and head engages the airway protective reflex.
- This reflex stops breathing temporarily.
- In rare cases it can be fatal.



Stephen Wealthall

swim by being thrown into water.

"Unfortunately, quite a lot of babies had difficulties. They had a lucid interval for a while then later on some

collapsed."

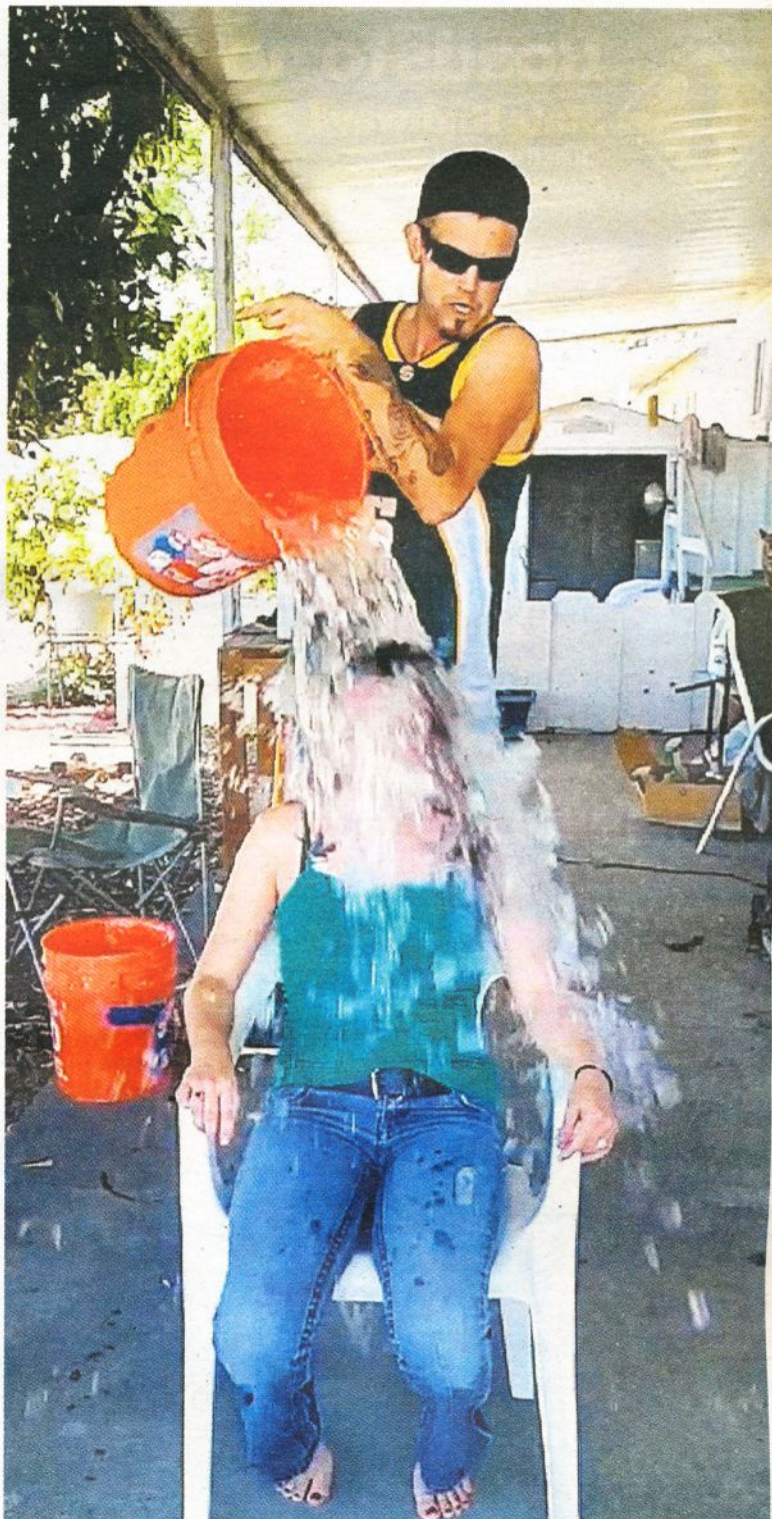
When studying cot death while at the Nuffield Institute for Medical Research at Oxford University, Dr Wealthall found similar reactions in rats when icy water was dripped on to their noses.

Dr Wealthall was so concerned he forwarded his evidence to the chief coroner for examination at Mr Tepania's inquest. He wanted to speak out sooner to warn people off the challenge, or to go feet first only into ice water.

Chief Coroner Judge Neil MacLean said Dr Wealthall's "neutral scientific advice" had been referred to the coroner presiding over Mr Tepania's inquest, who would "need everything she can get in this case".

"We were on the backfoot on this one right from the beginning because we missed the opportunity to have a post mortem examination so I actually appreciated getting that letter because there was some background."

The Ice Water Challenge, popular in the United States, has become a viral phenomenon in New Zealand where tens of thousands of dollars have been raised for the Cancer Society and CanTeen during the past two weeks.



Sudden exposure of the head and face to cold water can trigger the 'diving reflex' which causes a person to stop breathing, says Dr Stephen Wealthall.