

# RED ALERT

## Heat Exhaustion whilst Tree Felling

Feb 2019

### Situation:

A manual tree faller was falling on a hot day in Hawkes Bay. As the afternoon progressed he noticed he was having trouble sharpening his saw. He then made a small mistake on a cut. At this point the faller thought, 'What's going on here'. He then felled a tree which got hung up. As he was walking to the next tree to drive out the hang up, the hung up tree snapped due to the loading the tree was under. The butt bounced up and brushed past the faller knocking him to the ground. Whilst on the ground the faller saw the head of the hang up flying through the air directly towards him. He rolled out of the way and the head landed next to him. The faller called it quits after this and went up to his Ute. The temperature gauge in the vehicle was reading 35°



### Learnings:

The faller was fatigued and dehydrated despite the fact that he had drunk 5 litres of water over the day. Given the heat of the day his brain was too hot and not able to recognise the signs of fatigue kicking in. Normally an experienced faller like this would be able to sharpen a chain without issue, however, due to heat exhaustion and fatigue he was struggling with the simple tasks. The concerning aspect is that due to heat exhaustion the faller could not recognise where the issues were coming from! This compounded the problem as the chain was not cutting right, then the cuts became hard to get right. This resulted in the direction of the fall being affected leading to the hang up.

When the brain is not working correctly because it is too hot, how does it tell you to stop?

### Controls:

Heat exhaustion risks need to be managed before a situations like this develop. I.e: stop before fallers (or other workers in physically demanding tasks) before they get to a heat exhausted state.

On days that are predicted to be 30° + make sure a suitable plan is made at the morning tailgate. That might mean reviewing work at noon. The faller may need to stop work at to avoid working through the heat of the afternoon. What are 2 hours less of falling going to achieve in the overall scheme of things = Nothing.

It is also a responsibility of the crew to check in on the faller and make sure he or she is feeling ok and managing the conditions. Have they had a break recently? Do they have enough water on board? How are the concentration levels? Do they need an observer?

- Check in with your faller and make sure he's feeling ok.
- If it gets hot, 30°+, reassess. Can the work be done safely? Pulling the pin and continuing tomorrow morning when it's cooler may be the better option.
- Site aspect (north facing), slope, degree of difficulty are additional considerations. Would an observer or rotating fallers assist?
- Be aware - warning signs are hard to recognise when the brain and body is running at a hot temperature.
- Make sure you have cold water as it will help cool your internal body temperature (and therefore cool your brain) whereas warm water only hydrates and does not cool.
- Use Squencher to keep the electrolyte levels up in your system.

**This incident was self-reported by the faller. Thanks for "Standing in the Gap"**