

7 simple strategies to decrease heat related illness in your workplace

The research on heat related illness is comprehensive with a strong focus on the northern regions of Australia the Middle East and UAE. Below I have outlined some simple strategies that you can easily implement. This is by no means a definitive guide but I believe will aid everyone with simple solutions for an outdoor workforce.

- 1) **Implement pre-shift hydration testing** - This is the only accurate way to be sure employees are coming to work hydrated. If possible implement post shift testing as well but if this is too much focus on pre-shift. These results need to be recorded and used to measure the effectiveness of any intervention you put in place.
- 2) **Implement a pre-shift water drinking strategy** – Research points to “starting work in a hydrated state” as being the most important factor in eliminating heat related illness. Provide all employees with a drink bottle (600ml-1ltr) and at the start of each prestart have them fill it up. As prestart is being conducted employees must drink all the contents of the bottle. The research also shows that hydration levels in hot and extreme environments don't actually improve across the day, they either decrease or stay the same. Therefore the more hydrated you are at the start of shift the better placed you are across the shift.
- 3) **Implement time to set up the work area** – In hot and extreme environments the human body generally absorbs heat from the surrounding environment and needs to sweat to cool the core temperature down. In humid environments the sweating process is not as effective (due to excess moisture in the air) so it is essential that some form of air movement is present to assist in the cooling. In some workplaces this means having industrial fans and shade huts set up for employees. In areas of little to no air movement (still days, tunnels, trenches etc) fans and regular drink/rest breaks are essential.
- 4) **Education** – You need to educate workers on heat illness, not the boring 30-40 slides, make it fun and interesting. Key points such as:
 - The cycle of dehydration (work in heat, go home have a few beers/go to the gym, sleep with the air-conditioning on, get up drink a coffee red bull etc),
 - How the body cools itself,
 - How in hot and extreme conditions the majority of these cooling mechanisms become useless,
 - The importance of self-pacing,
 - What are Electrolytes?
 - Setting up their work area pre-shift.

- 5) **Implement Self Pacing and or Work Rest Breaks** - Ensure employees are aware of and promote the importance of self-pacing. This along with starting work hydrated have been shown to be the most important factors in limiting heat related injuries. Where self-pacing is not appropriate it is important that workers are allowed regular short breaks in shaded areas preferably with a fan or air conditioner.

- 6) **Implement an acclimatisation process** – It takes approximately 10 days for a worker new to a hot or extreme environment to become acclimatised. Ensure new workers are buddied with experienced workers and are provided with information specific to managing heat. Ensure workers returning from short R&R breaks are given 1-2 days to reacclimatise.

- 7) **Ensure regular meal breaks** – Research shows that the majority of the Australian population will get the majority of their required electrolytes from their diet, due to the high sodium levels of our diet. In extreme environments an electrolyte replacement drink is important especially when employees are drinking 8-10 litres per day.