

Hydration Fact Sheet

The Facts About... Healthy hydration for Construction Workers

Why is hydration important for construction workers?

Managers in charge of construction sites need to be aware of three things:

1. By law, employers must provide access to water in the workplace¹.
2. Scientists say "There is little doubt that performance during prolonged, continuous exercise in the heat is impaired by levels of dehydration" and that a loss of 2% of body mass due to dehydration can impair performance. "When performance is at stake, it is better to be well-hydrated than dehydrated," according to Dr Bob Murray, who says construction workers are one of the at-risk groups.²
3. When access to potable mains water may be limited, a bottled water cooler is the best bet.

Why building workers are at risk from dehydration?

In his paper on hydration, Dr Murray says that even in modest heat (that is 16°C / 60°F) heart strain increases and makes it essential to sustain blood flow to the active muscles, the skin and the brain. Construction workers wearing hot, protective clothing are particularly vulnerable to dehydration. "Dehydration has been shown to reduce physical work capacity and lower heat tolerance," he writes.

What are the dangers of dehydration

Even small levels of dehydration can create headaches, lethargy, or just an overall lack of alertness. In the long term it can create problems with the renal system and our mental functioning as well as our cardio-vascular system. Concentration lapses that may lead to simple but harmless mistakes in, say, an office environment, can lead to far more serious risks on a construction site. Water is a good choice as it is calorie free, does not contain caffeine and is good for dental health too.



What's the best means of providing on-site hydration?

Water coolers are safe, hygienic, cost effective and convenient. Ensure that you have a cooler supplied by accredited BWCA members, who undergo rigorous annual safety inspections. Some water cooler providers can supply both 110 volt coolers as well as 240 volt coolers. All equipment is PAT tested prior to delivery, so you can be reassured of compliance. Some suppliers are able to install equipment at short notice and are willing to fulfil short term hire requests, so your on-site hydration needs can be met easily.

Can you give guidance on the best way to provide safe hydration on site?

- Advise colleagues not to wait until they feel thirsty - as by then they are already dehydrated. Drink frequently especially during hot weather. Once thirst is felt, mental performance can decrease significantly.
- If your staff members drive or operate machinery in the course of their work make sure they don't drink whilst at the wheel but that they have enough water prior to a shift to keep the brain active and alert. Encourage them to take water breaks in hot weather.
- Ensure that if using bottled water coolers, the bottles are stored in a cool, dry, clean place.
- To ensure you find an accredited water distributor, check <http://www.bwca.org.uk/find-a-member.php>

About this Fact Sheet

This Fact Sheet has been produced by the British Water Cooler Association, the most respected trade body representing companies supplying bottled water and mains fed coolers for over 20 years. BWCA Members are under an obligation to adhere to strict Codes of Practice and best conduct and are audited for compliance annually by 3rd party inspection organisations.

Choose a BWCA Member – for hydration you can trust

1. *Workplace (Health, Safety and Welfare) Regulations 1992.* These regulations state that an 'adequate supply of wholesome drinking water' must be provided, and that it be readily available at suitable and clearly marked places.
http://www.worksmart.org.uk/health/does_my_employer_have_to_provide_drinking
2. Bob Murray, PhD presented his paper *Hydration and Physical Performance* at the ILSI North America 2006 Conference on Hydration and Health Promotion, November 29–30, 2006 in Washington, DC.
http://intl.jacn.org/content/26/suppl_5/542S.full.pdf