

BUILDER BEWARE: HAZARDS OF WORKING OUTSIDE

There can be a shortfall between what is required on site and what is provided. Yet construction workers who are well equipped to cope with noise and the environment they work in are not only healthier and happier, they're more productive.

By Lauren Prestney, Communications Executive, Site Safe New Zealand

Construction industry workers face dangers from the sun, the air and the materials they handle. As the health risks associated with the industry are so significant, employees and employers must know how to reduce any harm.

Treat the sun seriously

Skin cancer affects outdoor workers in alarming numbers because around 70% are exposed to the sun when UV levels are at their highest – from 11 am to 4 pm. A recent Otago University study found that males were most likely to be outside during these hours, and although half of that male population knows about the skin cancer risk, most still prize a tanned look.

The study also showed that the management of sun exposure was poor at best, and although sunscreen is provided, it is hardly ever used by workers or promoted by site management.

However, sunscreen only minimises the hazard and should be used as a last resort. Covering up is the best protection, although this may cause the body to overheat, which must also be managed.

UV rays can also affect eyes, causing cataracts and sunburnt retinas. To protect eyes from these rays, which can pass round the edge of sunglasses, choose glasses that are close fitting, wrap around and meet AS/NZS 1067:2003 *Sunglasses and fashion spectacles*. Alternatively, look for the words 'good UV protection' on the label or for categories 2, 3 or 4, as these sunglasses absorb more than 95% of UV radiation.

Keep up the water intake

Throughout the year, and especially in summer, it is important to rehydrate on a regular basis throughout the day. The human body is



70% water, and sufficient hydration is vital to maintaining a well functioning body.

Your body loses water through the simple acts of breathing, using the toilet and sweating. When there is an increase in temperature or physical activity, fluid loss is increased and it must be replaced at a greater rate than usual.

How do you know if you are dehydrated? The symptoms include:

- a dry mouth
- a headache
- fatigue
- extreme thirst
- feeling light-headed or dizzy
- urine is a darker colour than usual or you are not urinating as much as you normally do.

The key to actively prevent dehydration is to drink plenty of water at regular intervals

throughout the day. If you wait until you notice any of the above symptoms, it is already too late – you are already dehydrated.

Drinking water is key to maintaining a good level of hydration. Although drinking coffee, energy drinks and cola relieve thirst for a short period, the caffeine may cause more frequent urination leading to dehydration.

Sports drinks may also be used to maintain hydration, especially during long periods of physical activity, as they contain carbohydrates and help to replace electrolytes in the body.

Breathe easy

Approximately 10% of all reported respiratory issues in New Zealand can be largely attributed to occupational sources. Construction workers are at high risk of contracting respiratory

problems because of their regular exposure to wood and cement dust.

Studies undertaken in New Zealand show that wood dust from natural wood and manufactured boards such as MDF cause respiratory illness and, in rare cases, can cause cancer in the nasal passages. Additionally, silica from stone and concrete dust can cause asthma and lung damage that can lead to cancer in some cases.

The key to managing exposure to dust is to trap it at the source by using portable dust extraction systems. Covers and shields must be used when working with power tools such as angle grinders. Industrial vacuum cleaners are an effective method for cleaning up dust and for isolating dust from yourself or other workers. Sweeping with a broom should be avoided as this refloats the fine dust in the air that causes the major problems. Personal protective equipment such as dust masks only reduce the hazard and are a last resort. For men with beards, dust masks are ineffective because they cannot seal against the face properly so dust can still get in.

Good facilities promote health

Clean and hygienic workplaces look more presentable and attractive to clients and business partners and have been proven to reduce staff absenteeism due to illness.

Every year, the Department of Labour receives calls from workers on construction sites complaining about the lack of on-site facilities and amenities. Employers have a legal requirement under Section 6 of the Health and Safety in Employment Act 1992 to provide adequate site facilities necessary for worker wellbeing, including:

- toilets
- a washing and changing area
- a clean and sheltered area to eat and drink during breaks
- clean drinking water.

TOILETS

Toilets should be provided for the use of all staff on site. They must be regularly cleaned and maintained to ensure a safe and hygienic facility.

Where Portaloos are provided, they should be placed in a convenient location and be readily

accessible. They must have a plentiful supply of toilet tissue, soap, water and paper towels at all times.

If female workers are on site, they must have separate toilets that include sanitary disposal units.

AREA TO WASH AND CHANGE

Washing facilities should be readily available to all staff to ensure their safety and wellbeing. Washing facilities are required where workers may have been in contact with a hazardous or offensive substance or to merely wash their hands prior to eating. These facilities must include hot and cold water, cleansing agents and paper towels.

AREA TO EAT AND DRINK

An adequate shelter should be provided for staff to eat and drink in. This should be cleaned and maintained regularly to ensure employees are not being exposed to any harmful bacteria or substance that may make them ill.

CLEAN DRINKING WATER

Clean drinking water needs to be provided for staff. If there is no provision for running water on site (no mains supply), bottled water or a water container should be available free of charge.

By providing a clean and safe workplace, you can reduce absenteeism and therefore increase productivity, ultimately increasing profitability.

Listen up, managing noise is important

Noise-induced hearing loss is one of the construction industry's largest unmanaged risks yet, in most cases, it is preventable. Noise doesn't seem to be managed well because losing the ability to hear doesn't hurt and there is no visible injury.

The best way to manage this issue is by making good decisions. When purchasing tools, ask what the decibel rating is and whether a quieter option is available. Can the tool be fitted with mufflers to assist with volume output? It's preferable that excessive noise is eliminated or isolated, for example, by moving it away from the work area.

If being isolated from the hazard is not feasible, minimise it by wearing personal

protective equipment such as earmuffs. Their use requires monitoring by the employer and understanding by staff about the need to wear the protection and how to use it.

Any work environments that have a constant volume of over 85 decibels need to be evaluated and managed accordingly.

Handling it with care

Musculoskeletal injuries from manual handling are one of the biggest causes of injury that the Accident Compensation Corporation (ACC) deals with.

While building work often includes manual handling, associated risks can be lowered, where practical, by using mechanical aids such as trolleys, forklifts or cranes.

If workers cannot use these pieces of equipment, it is essential to protect against injury by only carrying loads that can be safely handled or by sharing the load. There are many information sources available to help undertake manual handling safely, including the *Code of practice for manual handling* from the Department of Labour and the *Manual handling risk wheel* from ACC. Alternatively, a short course on manual handling can be booked with Site Safe.

These hazards are only some of the many health risks workers in the construction industry are exposed to. If you want more information, visit www.acc.co.nz, www.dol.govt.nz or www.sitesafe.org.nz.

'As an ex-roofing contractor, I would be happy to work all day with my shirt off. I have already had two moles removed as a result.' Ryan Groves, Site Safe Safety, Health and Environmental Officer