

How to Beat the Heat



Working in hot weather

When the body is exposed to heat, or when too much body heat is produced by vigorous physical activity, the body will try to rid itself of the excess heat usually through dilation of blood vessels, sweating and the evaporation of the sweat.

People can become ill when they are exposed to more heat than their body can handle. Elevated air temperatures and humidity, working around hot machinery, vigorous activity, absence of a breeze or fresh air and exposure to direct sunlight all can increase the risk of heat illness.

Tips for keeping cool

What can you do to stay safe in hot conditions?

- Stay hydrated. Drink water or water-based drinks frequently (1 glass every 15 minutes in extreme heat).
- If possible, avoid direct sunlight or other heat sources.
- Turn on fans or open windows in enclosed areas.
- Rest frequently in cool, shaded areas.
- Avoid alcohol or caffeinated beverages and eat lightly.
- Wear lightweight, light-coloured and loose-fitting clothes made from cotton preferably.
- Wear wide-brimmed hard hats, neck protectors and apply high-factor sunscreen throughout the day.



Heat stress

Heat stress is a signal that tells you your body is having difficulty maintaining its temperature. Your heart pumps faster, blood is diverted from internal organs to your skin, you start breathing faster, sweating more, all to try and cool down. If your body can't keep up then you will suffer effects ranging from heat cramps to heat exhaustion, and finally to heat stroke.

Risks posed by exposure to heat

There are several common heat-related illnesses, some more severe than others. It is important that all workers and employers are aware of the signs and symptoms of these illnesses and know when to seek medical aid.

Minor conditions include:

- Heat oedema is swelling which generally occurs among people who are not acclimatised to working in hot conditions. Swelling is often most noticeable in the ankles. Recovery occurs after a day or two in a cool environment.
- Heat rashes are tiny red spots on the skin which cause a prickling sensation during heat exposure. The spots are the result of inflammation caused when the ducts of sweat glands become plugged.
- Heat cramps are painful spasms of the muscles. The muscles used in doing the work are most susceptible. The spasms are caused by the failure of the body to replace its lost body salts and usually occur after heavy sweating.

More serious conditions include:

- Heat exhaustion is caused by loss of body water and salt through excessive sweating. Signs and symptoms of heat exhaustion include: heavy sweating, weakness, dizziness, visual disturbances, intense thirst, nausea, headache, vomiting, diarrhoea, muscle cramps, breathlessness, palpitations, tingling and numbness of the hands and feet. Recovery occurs after resting in a cool area and consuming cool salted drinks.
- Heat syncope is heat-induced giddiness and fainting induced by temporarily insufficient flow of blood to the brain while a person is standing. It is caused by the loss of body fluids through sweating and by lowered blood pressure due to pooling of blood in the legs. Recovery is rapid after rest in a cool area.
- Heat stroke is one of the most serious types of heat illnesses and requires immediate medical attention. Signs of heat stroke include body temperature often greater than 41°C and complete or partial loss of consciousness.



To help your employees during hot weather, consider these helpful tips from our Clinical Governance team:

Whether your employees are working inside a hot space or outside under direct sun, you should consider these tips as appropriate for the environment they are in:

- Remove/eliminate or reduce the sources of heat where possible;
- Control the temperature using engineering solutions (fans, AC, physical barriers to reduce exposure to radiant heat, such as window coverings);
- Provide mechanical aids where possible to reduce work rate;
- Provide water;
- Provide appropriate PPE (some PPE incorporates personal cooling systems or breathable fabrics);
- Provide training (especially for new or young workers telling them about risks, safe working practices and emergency procedures);
- Allow workers to acclimatise;
- Identify those workers who may be more susceptible to heat stress because of an illness, condition or medication that may contribute to the early onset of heat stress.

