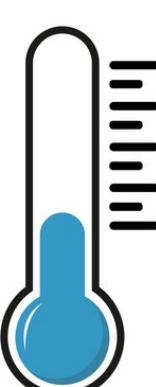


Ergonomics in Extreme Temperatures

Extreme temperatures can cause various problems for workers. Hot or cold work environments do not necessarily need to be outdoors; any location that is outside of the typical comfort zone of 13 to 29 °C is cause for concern.

Cold Environments

 Low temperatures reduce sensory feedback, dexterity, blood flow, muscle strength and balance. This can impact performance of complex mental and physical tasks and may even lead to potentially lethal side effects.

Hypothermia is a common cold injury associated with low body heat.

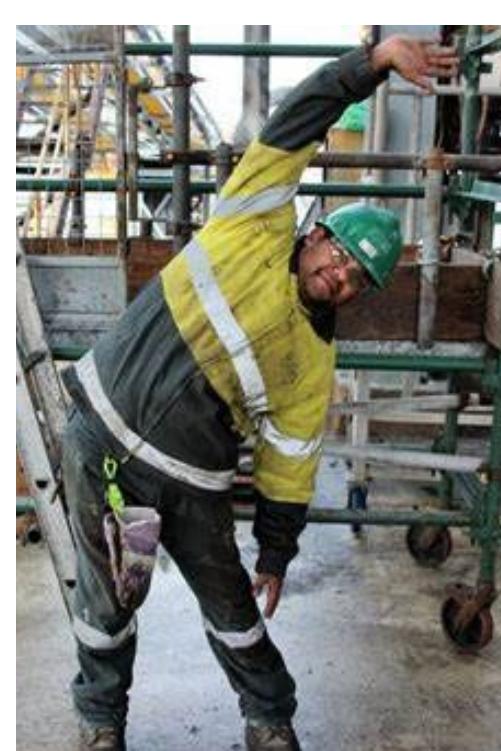
Warning signs are numbness, stiffness, drowsiness and poor coordination.

Frostbite is another common cold injury, which typically affects the nose, ears, cheeks, fingers and toes.



To help avoid frostbite, hypothermia, and other negative conditions:

- Dress in multiple layers of loose, dry, protective clothing
- Keep moving and stretch regularly
- Avoid getting wet
- Ensure that your hands, feet, face, head and eyes are covered
- Take regular breaks in a warm location



Ergonomics in Extreme Temperatures

Hot Environments

 Hot temperatures can lead to dehydration and muscle fatigue, and can cause dangerous conditions like heat stroke and heat exhaustion.

Heat Exhaustion is caused by a loss of body fluid through excessive sweating. Symptoms include heavy sweating, weakness, dizziness, intense thirst, nausea, headache, vomiting, diarrhea, muscle cramps and possibly palpitations



Heat Stroke can be fatal, and the symptoms vary person to person, but usually include dry, hot skin, an elevated body temperature and ultimately a partial or complete loss of consciousness.

The best solution to working in a hot environment is to remove yourself from the environment or reduce the temperature. This should be attempted first by increasing ventilation and/or cooling or providing heat shields, as appropriate. If that isn't possible:

- Drink fluids, preferably water, throughout the day to replace lost water.
- Protect yourself when working outdoors by covering up as much as possible.
- Limit your caffeine intake.
- Wear lightweight, breathable fabrics.
- Take rest periods to allow your body time to cool off.
- Perform strenuous work during the coolest times of the day, reserving lighter tasks for the high-heat periods.
- Know the signs of heat stress and heat exhaustion.

