



## Climatic Conditions Affecting Work

- Introduction
- Definition
- Roles and Responsibilities
- Procedure
- References

### Introduction

This procedure outlines the management of work involving extremes in climatic or particular workplace conditions and facilitation of improved management of working in excessive heat or cold conditions.

### Definition

Heat stress is the total heat burden to which the body is subjected by both external and internal factors; whether or not it results in adverse effects depends on the level of heat stress and the effectiveness of the body's cooling mechanisms

### Roles and Responsibilities

Line Managers are responsible for:

- implementing this procedure in their area of responsibility and accountability
- identifying heat or cold hazards
- completing risk assessments and implementing appropriate risk control measures in consultation with employees.

Employees are responsible for:

- not placing themselves or others at risk of injury
- reporting heat or cold hazards to their Line Manager or supervisor or health and safety representative as soon as becoming aware of them
- participating in the development of appropriate risk control measures for identified hazards to eliminate or minimise risk
- using control measures and any other action as required, which is designed to protect health and safety

Health and Safety Representatives are responsible for:

- assisting Line Managers, supervisors and staff in the identification and assessment of heat or cold health and safety risks.

### Procedure

Several factors contribute to heat stress and an individual's ability to cope such as:

- air temperature
- radiant heat
- air movement and humidity
- physical exertion and metabolic heat production
- clothing,
- physiological factors - degree of acclimatisation, physical fitness, age, dehydration and pathological conditions eg. heart disease, fever and some medications.

Reasonable and practicable measures to minimise the risks of heat or cold exposures shall be implemented in workplaces. Worksites where staff may be exposed to effects of excessive heat or cold shall be identified using the risk assessment form [OHSW 2](#) in OHSW Procedure – Hazard Management

Outside workers also face the added hazard of exposure to ultraviolet radiation and consideration must be given to the provision of appropriate protective clothing, glasses and skin protectors.

Environmental and climatic variances impact differently on individuals. In cold conditions the body may be unable to acclimatise to cold and therefore must be protected from loss of heat.

Depression of body core temperature (hypothermia) produces symptoms ranging from shivering



to numbness, muscular weakness and cramps. Localised exposure to cold may cause frostbite and chilblains.

Consideration should be given to using the following strategies:

- modifying the rate at which work is performed, allowing self-regulation of work and self-limitation of exposure to prevent symptoms from occurring
- rescheduling of certain work to other days or limiting it to cooler periods of the day
- modifying the hours of work
- rotation of employees engaged in heavier tasks
- scheduling regular rest breaks
- altering the location of work
- providing alternative work
- providing a supply of cool drinking water
- ensuring appropriate fluid intake
- erecting of temporary shade covers to reduce effects of direct sun
- using air circulating fans or portable coolers at the work site
- providing suitable sunhats. providing light protective safety clothing where appropriate
- installing roof and wall insulation in buildings
- insulating heat sources associated with furnaces or processes
- installing fans
- installing equipment to facilitate natural ventilation
- installing ducting to remove hot exhausts
- installing air conditioning or heating
- providing appropriate wet weather clothing for outdoor workers who may be exposed to inclement wet weather conditions.

#### References

- [University OHSW&IM Policy](#)
- [University OHSW Strategic Plan 2009 - 2011 \(PDF 158kb\)](#)
- [OHSW & Injury Management System \(PDF 128kb\)](#)
- [University OHSW Procedure – Hazard Management](#)
- [University OHSW Procedure – Confined Space Entry](#)
- [Occupational Health, Safety & Welfare Act, 1986](#)
- [Occupational Health, Safety & Welfare Regulations, 2010](#)