

Safety Bulletin

Thermal Comfort and Health Illness (Stress)

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Employees, students and supervisors are reminded of the following control measures to minimise the risk of heat illness and maintain thermal comfort during extended periods of hot weather.

Supervisors should assess the risks of thermal comfort and heat illness in consultation with employee Health & Safety Representatives and affected employees. If after implementing these recommendations, staff and students continue to be adversely affected by prolonged extreme heat, the Head of Department/School and manager should consult with staff about ceasing work under special leave arrangements or making alternative work arrangements.

Thermal comfort

Perception of thermal comfort is affected by many factors, including air temperature, air speed, floor temperature, vertical air temperature gradient, humidity, clothing, the amount of physical exertion, radiant temperature asymmetry, mean radiant temperature (the average temperature of the surroundings) and sun penetration.

Heat illness

Heat illness causes a range of medical conditions that can arise when the body is unable to properly cope with working in heat. These conditions include:

- Heat stroke a life threatening condition that requires immediate first-aid and medical attention;
- Fainting in heat (heat syncope);

- Heat cramps;
- Skin rashes (Prickly Heat);
- Heat fatigue; and
- Worsening of pre-existing illnesses and conditions.

• Heat exhaustion;

Signs of symptoms of heat illness include feelings of sickness, nausea, dizziness, weakness, clumsiness, collapse and convulsions. Staff or students with these signs or symptoms should seek immediate first-aid/medical attention.

Working indoors

The following actions are recommended to control thermal comfort for staff and students working indoors:

- ensure air conditioner is switched on (if fitted);
- minimise the time individuals are exposed to hot tasks through task rotation;
- where possible, arrange extra ventilation to increase air movement, for example portable fans;
- close doors and windows for all or part of the day to prevent hot winds entering the room or building;

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- where practicable, turn off heat generating equipment such as scree-based equipment photocopiers and incandescent lights;
- ensure windows are covered with blinds or other covering (if fitted);
- ensure fresh, cool water is provided;
- advise individuals to drink plenty of water; and
- advise individuals to wear light, loose clothing.

Working outdoors

The following actions are recommended to control thermal comfort for staff and students working outdoors, or in roof spaces, plant rooms and workshops:

- avoid heavy work and defer noon-essential work during the hottest part of the day;
- increase the number of rest breaks provided to individuals;
- wherever possible rotate staff through the day try to enable them to spend some time in a temperature-controlled environment;
- user personal water canteens;
- individuals should drink 250mL of water every twenty to thirty minutes;
- supervisors should ensure individuals drink sufficient water and don't rely on thirst as an indicator that they need to re-hydrate;
- use protective clothing, particularly covering the head. Head coverings should be wide brimmed hats with a UFP rating of 50+, rather than caps;
- wear sun glasses (UV protective safety glasses) for eye protection;
- use SPF 50+ sunblock on exposed parts of the body; and
- arrange work patterns that maximise time in shady areas.

Staff and students should advise their supervisor if they have a medical condition that would be exacerbated by exposure to excessive heat. The supervisor should make suitable arrangements to accommodate the needs of the individual. Further advice can be sort from your local Health and Safety Business Partner.

References and further information

Further advice can be sought from your local Health and Safety Business Partner – refer https://safety.unimelb.edu.au/health-and-safety-contacts

Further references include:

- Health & Safety website <u>Temperature</u> webpage (under Safety Topics)
- <u>WorkSafe website</u> provides guidance on <u>working in heat</u> (https://www.worksafe.vic.gov.au/resources/working-heat)
- <u>Compliance Code: Workplace amenities and workplace environment</u> (https://www.worksafe.vic.gov.au/resources/compliance-code-workplace-amenities-and-work-environment)