

*This document is under review, if you have any input, please email safety@unsw.edu.au.

HS722 Indoor Thermal Comfort Guidelines For Managers

Introduction

Extremes in air temperature in either hot or cold conditions can contribute to thermal discomfort in humans and may have adverse effects on concentration, productivity, morale and job efficiency. Thermal sensation is a subjective judgment and varies from person to person, which in turn makes it difficult to satisfy everyone within the same thermal environment.

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1. Scope

This document provides a means of ensuring that managers, supervisors, and employees are aware of strategies to address thermal comfort issues.

It applies to all University buildings and cover environments where staff, students, or contractors may be required to conduct work tasks or teaching & learning activities. Exceptions may include animal houses, research laboratories, computer server rooms, and any other areas that have been explicitly exempted on the grounds of a need for strict control of the environment within a defined space.

2. Thermal Comfort

Thermal comfort depends on environmental and personal factors including airflow (wind), air temperature, air humidity, physical activity, the type and amount of clothing worn, and radiant heat from nearby surfaces (windows, walls, concrete walkways and such).

There is a wide range of thermal accommodation conditions for staff and students across UNSW buildings. Air-conditioning is installed in less than half of these spaces. On-going building development and air-conditioning installations, in response to changing comfort expectations, continue to impose considerable strain on the University's resources.

Over time, the University is committed to improving its buildings by using passive measures, such as shading and insulation, to reduce heat gain, and by installing modern energy efficient air-conditioning and mixed mode systems.

In the meantime, it is recognised that some environments will, from time to time, be subject to unsuitable thermal comfort standards and will require steps to improve the wellbeing of occupants.

These guidelines provide information to assist in the management of the comfort of staff and students during varying and/or extreme climate conditions in the work environment, and to provide a means of ensuring that managers, supervisors and employees are aware of strategies to address thermal comfort issues.

Staff and students should report any concerns for their indoor thermal comfort to their manager/supervisor. The procedure for reporting such matters is documented in the Indoor Thermal Comfort Review Procedure.

3. Recommendations for Managers/Supervisors

Consultation

Managers and supervisors must monitor the effect of extreme temperatures on staff/students. When a significant proportion of people in a work area are experiencing thermal discomfort, the manager should investigate the cause(s) and consider making alternative work/study arrangements for staff and students.

The following factors and recommendations should be considered in the context of specific workplace, activities and tasks:

- level of physical activity in the tasks being performed
- temperature in the area
- whether the work performed by staff and students involves safety-critical tasks such as operating machinery or handling chemicals or hazardous tasks
- the number of people working in the area
- specific individual needs such as those arising from medical conditions
- concerns expressed by staff and students
- the necessity to meet deadlines.

Recommendations for hot and humid weather

- Wear clothing appropriate to the external climate including wearing lighter and looser fitting clothing (natural fabrics can be cooler than synthetic fabrics).
- Drink plenty of fluids.
- Try to increase air movement to allow evaporation of sweat by opening windows and doors where practical and with the use of personal or ceiling fans.
- Use blinds and curtains to decrease radiant heat from the outside environment.
- Maintain a sensible work pace.
- Avoid standing for long periods.
- Rotate duties so that staff spend shorter time on a task.
- Increase staff so that more people help with heavy or hot work.
- Negotiate with staff and students to take breaks in cooler and/or less humid areas.
- Negotiate to alter working hours so that certain work can be done in the cooler parts of the day such as early morning.
- Temporarily transfer staff to work in other areas of the building/campus in cooler and/or less humid areas.

If working conditions continue to be adversely affected by prolonged extreme heat, Heads of School may, at their own discretion, consider alternate work arrangements. Staff members who have approval to work from home during such conditions must comply with the UNSW Working from Home Policy.

Recommendations for cold weather

- Wear sufficient clothing with high thermal properties (eg wool, polar fleece).
- Move around and engage in active tasks as physical activity generates bodily warmth.
- Drink warm fluids.
- Use approved room heaters in un-heated or non-air-conditioned areas.



4. Heaters

- The use of personal heaters in an air-conditioned area where people are experiencing discomfort may exacerbate the situation, as they can interfere with the automatic control of the heating, ventilation and air conditioning system. For example, the operation of a personal heater may cause a nearby heating or air conditioning thermostat to falsely sense that the room is too hot, consequently increasing the cool air supplied to the room. If staff experience consistently uncomfortable temperatures, refer to the reporting procedure documented in the Indoor Thermal Comfort Review Procedure.
- Energy efficient heaters are available from UNSW Energy Management. More information is available on their website.
- Bar or fan radiators are prohibited in the University because of the high risk of starting fires and high energy consumption.
- Staff are prohibited from bringing personal heaters into UNSW workspaces from home or other sources.

5. Heat or cold vulnerable persons

A heat or cold vulnerable person requires more closely controlled temperature or humidity conditions than the general population due to health or other conditions. Staff/students with existing medical conditions including cardio-vascular diseases, high/low blood pressure, respiratory conditions and kidney disease may be more predisposed to experience health effects whilst working in uncomfortable conditions.

Special consideration may be given to people with existing medical conditions. In the first instance the manager or supervisor should consult the UNSW Reasonable Adjustments Guidelines and contact the Director, Human Resources or HR Consultant for your Faculty/Division.

6. Longer term thermal comfort

To resolve a longer-term thermal comfort issue, managers must notify Facilities Management.

The Indoor Thermal Comfort Review Procedure provides a systematic and consistent method of evaluating thermal comfort standards within the University's work, teaching & learning, and research environments.

7. Acknowledgements

[Work Health and Safety Act 2011 \(nsw.gov.au\)](http://nsw.gov.au)

[Work Health and Safety Regulation 2017 \(nsw.gov.au\)](http://nsw.gov.au)

[List of codes of practice | SafeWork NSW](#)

Appendix A: Version Control

Version	Authorised by	Approval Date	Effective Date	Sections modified
1.0	Director, Human Resources	3/03/2011	3/03/2011	New document
1.1	Director, Human Resources	29/04/2013	29/04/2013	Update to legislation Update Document Record to comply with legislation Updated Branding Logo in accordance with UNSW Branding Guidelines. Modified the document identifier from OHS to HS in accordance with WHS legislation review
1.2	Director, UNSW Safety and Sustainability	30 April 2014	30 April 2014	Reviewed for administrative updates
2.0	Director, UNSW Risk & Safety Management	8 August 2022	8 August 2022	Administrative updates, removed from Governance.

Updates to this document



Any suggestions, recommendations or updates to this document should be emailed to safety@unsw.edu.au with the email header stating *GUIDELINES UPDATE HS722*.

