

The following guidance note is intended to assist managers in the implementation of health & safety requirements for workplace temperatures.

#### Legislation

The Workplace Heath Safety and Welfare Regulations 1992 define a workplace as 'any premises or part of premises which are not domestic premises and are made available to a person as a place of work, including any place within the premises to which a person has access to whilst at work'.

Premises means any place, including an outdoor place, where workers are exposed to extreme weather conditions (outdoor work) and or extreme temperatures (e.g., working in a kitchen environment).

These regulations require that during working hours, the temperature in all workplaces inside buildings shall be reasonable – the Regulations do not state a minimum or maximum temperature.

## Work environments with extremes of heat and cold

The most common indicator for thermal comfort is air temperature – however using this alone is not a valid or accurate indicator and other factors should always be considered.

Environmental Factors - Air temperature, radiant temperature, air velocity and humidity.

Personal Factors – Clothing Insulation, Work Rate/Metabolic Heat (including physical characteristic).

# Heat Stress

The body reacts to heat by increasing the blood flow to the skin's surface, and by sweating. This results in cooling as sweat evaporates from the body's surface. Someone who is wearing protective clothing and/or performing manual tasks in hot and humid conditions could be at risk of heat stress because:

- sweat evaporation is restricted by the type of clothing and the humidity of the environment
- heat will be produced within the body due to the work rate and, if insufficient heat is lost, core body temperature will rise
- as core body temperature rises the body reacts by increasing the amount of sweat produced, which may lead to dehydration
- heart rate also increases which puts additional strain on the body
- if the body is gaining more heat than it can lose the deep body temperature will continue to rise
- eventually it reaches a point when the body's control mechanism itself starts to fail

The symptoms will worsen the longer someone remains working in the same conditions

# Symptoms

Health stress can affect individuals in different ways and some people are more susceptible than others, but some typical symptoms are:

• an inability to concentrate

- muscle cramps
- heat rash
- severe thirst a late symptom of heat stress
- fainting
- heat exhaustion fatigue, giddiness, nausea, headache, moist skin
- heat stroke hot dry skin, confusion, convulsions and eventual loss of consciousness. This is the most severe disorder and can result in death if not detected at an early stage

## **Risk Assessment**

All work activities must be subject to suitable and sufficient risk assessment to identify control measures to ensure, as far as is reasonably practicable, the health and safety of workers. <u>University</u> guidance on how to conduct a risk assessment should be followed.

The following are examples of suggested controls for thermal comfort

**Work location** – it may be possible to allow some workers to work from alternative environments (e.g., during hot weather working from home or in cooler buildings on campus). Where this is not an option, alternative controls must be considered.

Job Planning/Task Rotation – define systems of work to ensure the length of exposure time to uncomfortable temperatures/conditions is limited. Where it is known there are to be significant periods of heat or cold, tasks should be planned or rotated to prevent overheating or cold exposure. Where there is only likely to be extremes of heat at particular times (e.g., 11-3pm or only for a short number of days consider postponing/rescheduling the task/s.

Local heating or cooling – make the best use of air cooling, fans, opening windows, radiators, shading from direct sunlight with blinds, reflective film on windows to reduce the heating effects of the sun. etc.

Breaks and rest facilities – allow sufficient breaks for workers to warm up/cool down, get dry/change wet clothes and get hot/cold drinks, access shade and apply sunscreen. Allow outdoor staff to take hot drinks during very cold weather and/or to take brief breaks indoors.

Access to drinking water - workers should have access to potable water.

**Personal Protective Equipment** – Wearing PPE in hot environments may increase the risk of heat stress and reduces the body's ability to evaporate sweat, additionally it may be cumbersome or heavy. Choosing appropriate PPE for use in extremes of temperature should be considered as part of the risk assessment process (e.g. lightweight, breathability)

Monitoring and communication – During extreme weather conditions managers should monitor control options and consult with staff on their effectiveness to ensure the identification of issues.

Further information can be found at HSE - https://www.hse.gov.uk/temperature/index.htm

# University Arrangements

The university endeavours to provide reasonable internal comfort conditions for all staff and students throughout the year.

Where reasonable temperatures are not being achieved this should be reported to the <u>Estates</u> <u>Helpdesk</u> who will arrange for a review to be carried out.

Health and Safety Department

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