



Temperatures - Heat wave

Introduction:

During the summer when ambient temperatures can reach the mid > high 20s for short durations, workplaces can get uncomfortably hot.

We in the Health and Safety Department often receive calls at this time of the year from employees asking about legal maximum temperatures and asking that something be done about their plight. Here is some guidance that may help to alleviate the problem.

Maximum Temperature?

Firstly, you should understand that there is **NO** legal maximum temperature for workplaces, rather the Workplace (Health, Safety and Welfare) Regulations 1992 requires that during working hours, the temperature in all workplaces inside buildings shall be reasonable.

The Approved Code of Practice (ACOP) to the Regulations states that in extremely hot weather, fans and increased ventilation may be used instead of local cooling and where reasonable temperatures cannot be maintained, systems of work that limits the time that persons are exposed to uncomfortable temperatures (e.g. job rotation, regular breaks, etc) should be considered.

Building Design:

You should be aware that, in general, buildings in the UK are not designed to deal with hot temperatures, but rather they are designed for our more normal cooler climate where insulation to maintain heat within the building is considered the important factor. Consequently, at these exceptional times of heat waves our stone and double glazed buildings heat up over a period of several days and then act somewhat like a storage heater and maintain that heat. It is perhaps then fortunate that we usually only experience elevated temperatures for a relatively short period of time and often only every few years.

There are very few of the University's buildings that have full air conditioning systems fitted, rather the majority of buildings that have mechanical ventilation have air handling units, which take air into the building at ambient temperature and supply it directly to the rooms after passing through a filter. However the temperature of the air may well be a couple of degrees above ambient by the time it is supplied to individual rooms as it will have gained temperature from passing over a fan, through the filter and along ducting. You can therefore see that there is little that the Estates and Buildings Department can do to meaningfully alleviate excessive temperature, other than to ensure that the building's heating system is turned off and that wild heat gain from hot water

pipes, plant rooms etc. is reduced to a minimum through lagging and insulation.

Practical Advice:

Building users and School/Unit management can however take some simple common sense measures that may help to mitigate the affects of exceptional heat wave temperatures:

- Open windows where possible to promote through air movements within the building. By opening windows first thing in the morning this will help to reduce heat build up. Please ensure this does not present a security risk.
- Use window blinds or reflective film to reduce the heating effect of the sun.
- Site workstations away from direct sunlight or other heat sources.
- Make use of oscillating fans (desk or free-standing) to move hot air. Whilst these fans do not actually cool the air, the increased air movement across the skin presents a cooling feeling.
- Schools/Units should consider the purchase of electric fans to aid staff comfort during very hot spells of weather.
- Take regular cold drinks, especially water. Consider filling jugs with tap water and placing in the fridge. Avoid caffeinated or fizzy drinks as these tend to dehydrate the body.
- Management should consider relaxing dress codes that may exacerbate the discomforting affects of high temperature e.g. wearing of neckties, jackets, tights, etc.
- Managers should take into account those with special requirements such as pregnancy, disabilities, those with certain illnesses or on medication. Advice can be sought from the Occupational Health Unit if necessary.
- Wear light coloured loose fitting clothing.
- Persons who wear protective clothing such as coveralls, or laboratory coats, must not remove these during hot periods as they are an important risk control measure, rather they should consider whether it is practical to remove clothing normally worn under such protective garments e.g. shirts, blouses, trousers, etc and thus reduce the insulating rating of their clothing. Many workers who normally wear indoor protective clothing/uniforms (e.g. nurses, chefs) routinely wear only underwear beneath their protective clothing so helping to maintain a reasonable body temperature whilst within buildings, or areas, that are at a higher than normal temperature for operational reason.
- Turn off electrical equipment when it is not in use. Do not leave your PC, photocopiers, etc. on standby over lunchtime, or overnight, as several hundred watts of wild heat can be added to rooms from such equipment.
- Ask Estates and Buildings to insulate any hot plant or pipes.
- If your work requires you to work in areas that are hot because of a work process try to rotate tasks with a colleague working in cooler areas, or limit the time you spend in hot areas by taking regular short breaks.

- In areas where the temperature is extremely hot for long periods of the year, seek advice from Estates and Buildings on air coolers or air conditioning units.

Outside Workers

- If you work outdoors keep covered up at all times, and keep your top on.
- Wear clothing made from close-woven fabric to reduce UV exposure, and preferably wear clothing with long sleeves.
- Wear a hat. If practicable wear a wide-brimmed hat, or a sun cap with a neck guard (one which offers shade for the neck).
- A safety helmet will provide some shade for the head. A hanging flap can protect the back of your neck if you work leaning forward.
- Use sunscreen on exposed parts of the body such as your face, neck and arms.

If you think there is a genuine fault in the air supply system, or the building heating has not been turned off, etc. by all means you should contact the Estates and Buildings Department and ask that the problem be investigated, but please remember that in the majority of cases there really is little that can be done to cool buildings down apart from very basic common sense measures similar to those outlined above.

Have a good summer and enjoy the good weather, especially when you are not at work, but even then please be sensible, use good sun creams, limit your exposure times, drink plenty water and keep your head covered.

For further guidance and advice contact Candice Schmid, occupational.hygiene@ed.ac.uk, the University's Health and Safety Adviser, 51 4261.