




# London Borough of Enfield

## Hot Weather and High Temperatures Guidance

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This plan is subject to ongoing change and will be updated as and when required.

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**ADOPTED BY THE GOVERNORS OF CHASE SIDE PRIMARY SCHOOL ON WEDNESDAY 16<sup>TH</sup> OCTOBER 2024**

**TO BE REVIEWED OCTOBER 2026**

## **Introduction**

Complaints about hot, stuffy offices are a common feature of UK summers. As the frequency of summer heatwaves in the UK seem to be on the rise, we need to consider the effect of the heat on employees and take the necessary steps to protect their health and welfare. There are always questions around the issue of a maximum office temperature, the risks of working in hot conditions indoors and the actions that should be taken. A common question is 'Is there a legal indoor working temperature?'

## **When the workplace is too hot**

When the workplace becomes too hot, it is not just an issue about comfort. It reduces productivity and can also be a health and safety issue. In hot conditions, people can suffer from a loss of concentration and increased tiredness, dizziness, fainting, or even heat cramps. There is an increase in the likelihood of accidents due to reduced concentration and slippery, sweaty palms.

Indoor environmental conditions substantially influence health and safety and productivity. The air temperature in the office has a strong effect on working performance. Although there is some disagreement on the temperature for optimal productivity, most studies have found it is between 21°C and 23°C. Generally, there is an agreement that productivity starts to diminish when office temperatures rise above this.

An over hot workplace can impact the health and wellbeing of employees, with risks including dehydration and heatstroke. If a person's blood temperature rises above 39°C, there is a risk of heat stroke or collapse. Above 41°C, delirium or confusion can occur and there is a risk that if blood temperature reaches this level, it can prove fatal or cause irreparable organ damage.

Everyone is different. Some individuals can tolerate much higher workplace temperatures than others. Weight and the amount of insulation (fat) there is in the body will impact on its ability to lose heat. Young people, pregnant women and the disabled tend to have a lower tolerance to high temperatures and there is some evidence of a gradual reduction in the effectiveness of the body to regulate its own temperature after the age of 60. In addition, medical factors and medication may affect an individual's tolerance.

There is also a difference in core body temperatures between men and women. There may be a number of other factors that affect temperature, including hormone changes or imbalances. The opening statement is good. There will be other factors that affect tolerance to high temperatures so the key indicator will be what the individual employee finds to be reasonable.

## **Is there a maximum indoor temperature?**

In the UK, there is no maximum temperature for workplaces inside buildings. However, the Workplace (Health, Safety and Welfare) Regulations 1992 require that the temperature in all workplaces inside buildings during working hours is “reasonable”. There is no consensus over what a reasonable temperature is. It depends on the type of work being done (manual, office, etc), the type of workplace (kitchen, air-conditioned office, etc) and the nature of the workforce.

On the Health and Safety Executive (HSE) website, it claims that a meaningful maximum temperature cannot be given due to the high temperatures found in, for example, glass works or foundries. The HSE points out that in such environments, it is still possible to work safely provided appropriate controls are present. In addition, factors other than air temperature, i.e. radiant temperature, humidity and air velocity, become more significant and the interaction between them become more complex with rising temperatures.

## **Other factors influencing thermal comfort at work**

Air temperature is not the only parameter affecting thermal comfort. Humidity, wind speed, radiant heat sources, clothing including personal protective equipment etc. are also likely to have an effect which an ordinary thermometer will not take into account.

Humidity can contribute to thermal discomfort and the risks to health caused by hot weather. High humidity environments have a lot of vapour in the air, which prevents the main method of heat reduction, the evaporation of sweat from the skin. This causes the body's temperature to rise. In certain conditions (air temperatures above 35°C/95°F and high humidity) the body's normal temperature control system is unable to effectively regulate its internal temperature with serious risks to health.

Radiant temperature (i.e. heat radiated from hot objects such as hot surfaces, furnaces, ovens, kilns, dryers, molten metals and machinery, etc) has a greater influence than air temperature on the ability of persons to lose heat to the environment.

Air velocity — the speed of air moving across the employee — is an important factor in thermal comfort. It can help cool them if the air is cooler than the environment. The greater the air velocity, the greater the heat exchange between people in a space and the air around them. However, opening windows is only effective as a coolant if the temperature outside is lower than that inside.

Thermal comfort is very much dependent on the insulating effect of clothing on the wearer. This is particularly so where employees are not allowed to make adaptations to their clothing, i.e. they need to wear a specific uniform or use personal protective equipment (PPE). Wearing non-breathable vapour-impermeable PPE prevents the evaporation of sweat, producing a high humidity.

The metabolic heat produced by physical work in a hot environment has to be lost so that the worker does not overheat. If insufficient heat is lost, blood temperature will rise, and so does the risk of adverse health effects.

## **Risk assessment for hot weather**

If the raised temperature is presenting risk to employees, a risk assessment should be carried out to assess whether there is a risk of the exposure of indoor workers to high temperatures during the summer. This should identify any hazards and problems, identify those at risk, and indicate the precautions that need to be taken to ensure the health of the workers.

Aspects that should be considered during the assessment are as follows.

- *The working climate*: including the air temperature, humidity, air movement and the presence of any heat sources.
- *Physical activity*: the extent to which physical activity is likely to generate body heat. This should consider the amount of work and the time in which the work should be done, working hours and the time of day the work is carried out.
- *Clothing and PPE*: particularly respiratory protective equipment, and the extent to which it is likely to contribute to overheating.
- *Vulnerable workers*: identify susceptible employees such as the young, old, disabled, pregnant or those on medication, and any additional procedures or resources required.
- *Menopause* and those with *underlying health conditions* should also be considered.

## **How to control temperature and humidity**

Employers are not legally obliged to provide air conditioning in workplaces. They are expected to provide reasonable temperatures and a sufficient quantity of fresh or purified air.

Ventilation should be used to combat high temperatures and high humidity. Suitable ventilation can take the form of air conditioning and, to a lesser extent, mobile air-conditioning units and fans. Blinds or curtains can be used to block out sunlight. Solar control window film can be used to reduce solar heat gain and can also combat intense glare. If employers use air conditioning, they need to ensure that the system is regularly serviced and checked to ensure it is working at optimal levels at all times. Badly functioning air conditioning can lead to increased rather than lower temperatures and can also dry out the work environment, causing throat irritation and problems for workers who wear contact lenses.

During periods of high summer-time temperature, workers should take regular breaks. In hot weather employers should consider arranging for workers to rotate their jobs.

## **An indoor heat stress prevention plan**

If staff are exposed to heat stress it may be necessary to produce an indoor heat stress prevention plan. This should be developed to handle indoor heat. It should include the following:

*Hydration:* Employees should be encouraged to keep hydrated to avoid overheating and heat stress. Employers should provide cool water supplies in the workplace and encourage employees to drink regularly. They should advise employees to drink water rather than tea or coffee, both during working hours and at home.

*Information:* If it is necessary for workers to work in high temperatures, they should be educated about the symptoms of heat-related illnesses and the proactive measures they can take to protect themselves.

*Clothing:* Wearing too much clothing may prevent the loss of heat from the body. This can occur when employers have a dress code in the workplace, e.g. a uniform to communicate a corporate image. In hot weather it is important to assess whether the clothing has an adverse effect on thermal comfort and whether there is a case for relaxing the dress code by allowing workers to wear more casual clothing or by supplying the workers with comfortable, lightweight clothing.

*Personal protective equipment.* PPE reduces the body's ability to evaporate sweat. In warm/hot environments, wearing PPE that is cumbersome and/or heavy may increase the heat being generated inside the body, particularly when there are high work rates. PPE that is non-breathable and vapour-impermeable prevents sweat evaporating. It is therefore important to assess the risk from wearing PPE in hot weather and whether the PPE is the most appropriate available. Can PPE made from a breathable fabric be used, or is there a new, more appropriate, version of the PPE available? Care must be taken to ensure that in the heat, employees do not unzip or remove their PPE just to cool down, thus exposing themselves to potential hazards and risks. The need for reducing the time working in the PPE should be considered.

*Vulnerable workers:* Hot weather can make workers feel tired and less energetic, especially those who are young, older, pregnant or on medication. Employers may wish to give these workers more frequent rest breaks and reduce their hours. The Management of Health and Safety at Work Regulations 1999 requires employers to assess risks to pregnant women from extremes of heat as they tolerate heat less well. A person's physical characteristics should always be borne in mind when considering their thermal comfort, as factors such as their size and weight, age, fitness level and sex can all have an impact on how they feel, even if other factors such as air temperature, humidity and air velocity are all constant.

*Fasting:* When Ramadan falls in the summer months, Muslims who fast each day from sunrise to sunset may wish to use annual leave. Employers could consider holding meetings etc. in the mornings when energy levels are higher or if possible, consider a temporary change in working hours.

*Manual Work:* The more physical the work, the greater the metabolic rate and the more heat is produced. This means that more heat has to be lost to prevent overheating. Workers carrying out manual work in hot conditions should have regular breaks and drink plenty of water. Consider whether you can shift working hours away from the hottest times of the day.

*Sun Glare:* Bright sunlight can make work in offices particularly very difficult due to the incessant sun glare on screens. This can be combatted by using blinds or solar control window film.

### **Note on first aid**

Before the hot days of summer are likely to arrive, first aiders should check that they are aware on the treatment of the range of conditions caused by extremes of heat.

### **Review**

After a spell of high temperature, the arrangements for ensuring thermal comfort should be reviewed. Were the arrangements effective? What do the employees think? Have they expressed their satisfaction or have there been any complaints? Has there been any change in the frequency of unsafe actions, accidents, illnesses and absenteeism? Has productivity been maintained or reduced?

It seems likely that heatwaves will become a more common feature of future summers and, consequently, managers of offices and other indoor workplaces should have procedures in place ready to counter the effect of high temperatures.

Enfield Council sends out advice following an alert from the Met Office to schools. This is circulated by the Community Safety Team.

An example of the notifications is as follows:

#### Met Office – Red Alerts

A Met Office Red Alert indicates that it is very likely that there will be a risk to life, with substantial disruption to travel, energy supplies and possibly widespread damage to property and infrastructure. People should avoid travelling, where possible, and follow the advice of the emergency services and local authorities.

Where a Red Alert is issued for extreme heat, school and college employers must ensure that an immediate, additional risk assessment is carried out and the control measures indicated are enacted, which could include full or partial closure of the site, if the risk assessment deems this necessary. The risk assessment must also take account of travel to and from the site for learners and staff, and the potential for disruption to public transport systems later in the day.

## Met Office - Amber Alerts

A Met Office Amber Alert indicates that adverse health effects are likely to be experienced by those vulnerable to extreme heat, with the wider population likely to experience some adverse health effects, e.g., sunburn or heat exhaustion. Travel delays are possible and there's an increased risk that heat-sensitive systems may fail. So, some changes to routines may be appropriate, following a risk assessment.

### Hot Weather and High Temperatures Risk Assessment Sheet

<b>Description</b>	Hot Weather and High Temperatures	<b>No. of pages:</b>	3	<b>Page number:</b>	1
<b>What are the hazards?</b>	<b>Who is at risk and How would they be harmed?</b>	<b>What is done to reduce/control the risk?</b>	<b>What more can be done to reduce risk?</b>		<b>Action by whom, by when?</b>
General – Heat levels are high in building due to hot weather and high temperatures	<p>Council staff, teachers and pupils may suffer discomfort or difficulty working / concentrating due to the heat and high temperatures.</p> <p>Share with staff what measures will be introduced once a heatwave has been announced.</p>	<p>Ensure reasonable degree of air movement distributing fresh air throughout buildings.</p> <p>Consider the hot weather when allocating space for activities.</p> <p>Consider weather when planning activities.</p> <p>Provide regular drinks of water and means of hydration.</p> <p>Relax formal dress codes.</p> <p>Windows and curtains should be drawn from the beginning of the day to help keep the temperature down.</p> <p>When not in use, appropriate electrical equipment should be turned off.</p>	<p>Monitor and if problems arise, review the control measures.</p> <p>Consider:</p> <ul style="list-style-type: none"> <li>• Relocating to cooler areas.</li> <li>• Timetabling sports days and other outdoor events or activities for earlier in the summer or spring term and including contingency days.</li> <li>• Working outdoors (ensure this is only under good shade)</li> </ul> <p>Extra (for consideration):</p> <ul style="list-style-type: none"> <li>• Provide portable air-conditioning or fans</li> <li>• Provide fixed air-conditioning</li> </ul>		

		<p>Managers should allow more frequent short breaks for staff.</p> <p>Restrictions on uniform policies should be lifted.</p> <p>Organisations should actively consider flexible working enabling staff to travel to and from work safely.</p> <p>Special risk assessment for pregnant and menopausal workers and others particularly affected by heat.</p>		
Manual Work – the amount of work and the time in which it has to be carried out.	Staff undertaking physical activity are likely to generate body heat. This can cause heat stress and dehydration.	<p>More frequent rest breaks in the shade.</p> <p>Frequent hydration.</p> <p>Removal of personal protective equipment when resting to help encourage heat loss.</p> <p>Sun protection – SPF.</p>	Reschedule work to cooler times of the day where possible.	
Fasting when Ramadan falls in the summer months.	Staff who are fasting when Ramadan falls.	<p>Staff may wish to use annual leave.</p> <p>Employers could consider holding meetings in the mornings when energy levels are higher.</p>	Consider a temporary change in working hours.	
Sun Glare – bright sunlight can make work in offices difficult due to the sun glare on screens.	Staff who use Display Screen Equipment for most of their job role.	Consider drawing blinds or use a solar control window film or consider drawing blinds where this does not worsen ventilation or use a solar control window film.	Consider purchasing an anti-glare screen for computer screens.	

	This can cause eyesight discomfort.			
Vulnerable Workers/pupils – some individuals are more vulnerable in the hot weather and need to take extra precautions to prevent heat related illnesses, such as heat stress and heat stroke.	Hot weather can make workers feel tired and less energetic, especially those who are very young, older, pregnant or on medication. They are more likely to develop health related illnesses such as heat stress and heat stroke.	<p>Drink frequent cool drinks.</p> <p>Take frequent breaks.</p> <p>Wear lightweight clothing, including hats if outdoors.</p> <p>Where appropriate review existing or carry out new individual risk assessments or vulnerable workers/pupils</p>	<p>- Provide portable air-conditioning or fans.</p> <p>- Provide fixed air-conditioning.</p>	