UNIVERSITY OF SUSSEX BRIGHTON

Guidance on Working in Hot Weather

1. Introduction

During periods of hot weather, it is essential to recognise and manage the risks associated with exposure to heat and solar radiation. Prolonged or intense exposure during the working day can have significant adverse effects on health, particularly where work is physically demanding or undertaken outdoors.

During the summer months, staff may be exposed to extended daylight hours and higher temperatures without fully appreciating the associated risks. Ultraviolet (UV) radiation from the sun can cause both short-term and long-term harm, including sunburn, blistering, and premature skin ageing. Repeated or excessive exposure increases the risk of developing skin cancer, which is one of the most common cancers in the UK. Appropriate protective measures should therefore be taken whenever there is a risk of significant sun exposure.

Exposure to high temperatures can also lead to heat-related illnesses, most commonly heat exhaustion and, in more severe cases, heatstroke. These conditions can occur during heatwaves, in hot environments, or as a result of strenuous physical activity. Symptoms may develop rapidly over a short period or gradually over several hours or days. Early recognition and effective control measures are critical to prevent escalation to more serious health outcomes.

2. Scope

This guidance applies to all University staff, students, and contractors exposed to heat or sunlight during work activities, both indoors and outdoors.

It covers periods of hot weather or any conditions that may lead to heat stress, including on-campus and off-site work.

The guidance supports risk assessment and control of heat-related risks but does not replace the need for task-specific risk assessments.

3. Definitions

Dynamic Risk Assessment - an ongoing assessment process that allows risks to be evaluated and controlled in real time as environmental conditions (such as temperature) change.

Heat Exhaustion - a heat-related illness caused by dehydration and prolonged exposure to high temperatures, characterised by symptoms such as dizziness, sweating, fatigue, and nausea.

Heat Stress - a condition where the body is unable to maintain a safe internal temperature due to exposure to high temperatures, resulting in potential adverse health effects.

Heatstroke - a severe and potentially life-threatening condition where the body's temperature exceeds safe levels (typically above 40°C) and is unable to regulate itself.

Heatwave - a period of abnormally high temperatures, typically identified through UK Health Security Agency (UKHSA) and Met Office heat alerts, which may increase risks to health and wellbeing.

Personal Protective Equipment (PPE) - equipment worn to reduce exposure to hazards, including items such as hats, sunglasses, and sunscreen used to protect against sun exposure.

Reasonable Adjustments - changes to working conditions or practices made to reduce risk to individuals, particularly those identified as vulnerable.

Thermal Comfort - a person's perception of their working environment as neither too hot nor too cold, influenced by temperature, humidity, air movement, and clothing.

Ultraviolet (UV) Radiation - invisible radiation from the sun that can damage the skin and eyes, leading to sunburn and increasing the risk of skin cancer.

Vulnerable Persons - individuals who may be at increased risk from heat exposure, including those with pre-existing medical conditions, pregnant workers, older individuals, or those undertaking strenuous work.

4. Heat Alerts & Weather Warnings

4.1 Heat-Health Alerts (UKHSA and Met Office)

The University recognises the UK Health Security Agency (UKHSA) and Met Office Heat-Health Alert system, which operates across England during periods of elevated temperatures. This system provides early warning of conditions that may pose a risk to health and wellbeing.

Heat alerts are issued at different levels (e.g. yellow, amber, red) based on forecast temperatures and their potential impact. Alerts are informed by both daytime and night-time temperatures and are region-specific. Prolonged periods of high temperature can significantly increase health risks, particularly where conditions persist over consecutive days and nights.

Managers and staff should monitor official alerts and follow relevant public health advice when issued. Further information on heat impacts and protective measures is available from UKHSA and the Met Office.

4.2 UK Weather Warnings – Extreme Heat

The Met Office issues weather warnings to highlight potential impacts from severe weather, including extreme heat. These warnings provide clear, impact-based information to support decision-making and typically include:

- A headline summarising the expected weather conditions
- A “What to expect” section outlining likely impacts and severity
- A “What you should do” section providing advice and recommended actions
- A “Further details” section containing additional forecast information

Where heat-related weather warnings are issued, managers and staff must take appropriate action in line with this guidance and any advice provided by the Met Office.

During amber or red warnings, consideration must be given to:

- The safety of staff travelling to and from work
- Modifying or postponing higher-risk activities
- Increased monitoring of staff wellbeing especially those that are vulnerable
- Implementing additional control measures to reduce heat exposure

4.3 Business Continuity

During periods of amber and red heat alerts or warnings, managers must review local business continuity arrangements to ensure the safe continuation of essential activities.

Consideration should be given to:

- Adjusting working hours (e.g. earlier start/finish times)
- Reducing or suspending non-essential or high-risk work
- Enabling remote or flexible working where feasible
- Prioritising critical services and activities
- Ensuring adequate staffing levels and welfare provision

Decisions should be based on risk assessment and take into account environmental conditions, the nature of the work, and the needs of vulnerable individuals.

5. Heat Related Illness

5.1 Overview

Heat-related illness occurs when the body is unable to regulate its internal temperature effectively. Under normal conditions, the body cools itself through sweating; however, this mechanism can become insufficient in certain environments.

Factors that increase the risk include:

- High temperatures and humidity
- Limited air movement or poor ventilation
- Direct exposure to sunlight
- Strenuous physical activity
- Personal factors such as medical conditions, medication use, or physiological changes

Failure to manage these risks can result in a range of conditions, from mild discomfort to life-threatening illness.

5.2 Heat Exhaustion

Heat exhaustion is a common heat-related illness caused by dehydration and loss of salts due to prolonged exposure to heat. It can affect anyone, particularly those working in hot environments or undertaking physical activity without adequate hydration.

If not identified and treated promptly, heat exhaustion can progress to heatstroke.

Typical symptoms include:

- Headache
- Dizziness or confusion
- Loss of appetite, nausea, or feeling unwell
- Excessive sweating with pale, clammy skin
- Muscle cramps (arms, legs, abdomen)
- Rapid breathing or pulse
- Elevated body temperature (typically 38°C or above)
- Intense thirst

Symptoms are similar in adults and children, although children may appear unusually tired, floppy, or drowsy. Early recognition and prompt cooling are essential.

5.3 Heatstroke

Heatstroke is a serious medical emergency and the most severe form of heat-related illness. It occurs when the body temperature rises to dangerous levels (typically 40°C or above) and the body can no longer cool itself.

Without rapid treatment, heatstroke can cause permanent organ damage or death.

Key indicators include:

- Very high body temperature

- Hot, dry skin (may stop sweating)
- Altered mental state (confusion, agitation, irrational behaviour)
- Seizures or loss of consciousness
- Rapid deterioration, potentially leading to coma

If heatstroke is suspected:

- **Call emergency services immediately (999)**
- If on campus, contact **Security (01273 87 3333)**
- Stay with the individual and begin first aid measures

Key Differences: Heat Exhaustion vs Heatstroke

Heat Exhaustion	**Heatstroke**
Temperature 38–<40°C	Temperature ≥40°C
Pale, cool, clammy skin	Hot, often dry skin
Heavy sweating	Little or no sweating
Gradual onset	Rapid deterioration
Can recover with cooling	Medical emergency

5.4 First Aid for Heat-Treated Illness

If a heat-related illness is suspected, act quickly to cool the person and prevent deterioration:

- Move the person to a cool, shaded, or well-ventilated area
- Help them to lie down and raise their legs slightly
- Encourage them to drink cool fluids (water or isotonic drinks)
- Cool the body by:
    - Spraying or sponging with cool water
    - Fanning
    - Applying cold packs (e.g. neck, armpits)
- Continuously monitor breathing, responsiveness, and pulse
- Stay with the person at all times

Call for emergency medical assistance (if on campus ensure Security call for emergency medical assistance) if the person:

- Does not improve within 30 minutes
- Has hot, dry skin or stops sweating
- Has a temperature approaching or exceeding 40°C
- Experiences confusion, shortness of breath, or persistent symptoms
- Has a seizure, loses consciousness, or becomes unresponsive

These are signs of heatstroke and require immediate emergency response. Whilst awaiting help, continue cooling measures, place unconscious individuals in the recovery position, and do not leave the person unattended.

5.5 Heat Cramps

Heat cramps are painful muscular spasms that happen suddenly, affecting legs or abdominal muscles. They usually happen after physical activity in people who sweat a lot or have not had enough fluids. Victims may be drinking water without adequate salt content.

What to do if someone is suffering from heat cramp:

- Sit or lay the affected person down in the shade.
- Provide cool drinks, lightly salted water or sports drink.
- Stretch affected muscles.

5.6 Sunburn

Sunburn is skin damage caused by exposure to ultraviolet (UV) radiation from the sun or artificial sources. It is a preventable occupational hazard for outdoor workers.

Short-term risks include:

- Red, painful, and inflamed skin
- Peeling or blistering

Long-term risks include:

- Skin cancer (melanoma and non-melanoma)
- Premature ageing of the skin
- Eye damage from UV exposure

The strength of the sun can be underestimated, particularly in windy or overcast conditions. Staff may not notice they are burning until symptoms develop.

Severe sunburn can contribute to dehydration and increase the risk of heat exhaustion or heatstroke. Signs of severe sunburn include:

- Blistering, swelling, or extensive redness
- Fever or chills
- Dizziness, nausea, or fatigue
- Headache or muscle cramps

All skin types can be affected by UV exposure. While individuals with darker skin may have greater natural protection, they are still at risk of sun damage.

Severe sunburn may occur alongside symptoms of heat-related illness and should be treated accordingly.

5.7 Staff at Increased Risk (Health Conditions and Pregnancy)

Managers must give particular consideration to staff who may be at increased risk from exposure to high temperatures, including those with underlying health conditions, those taking certain medications, breastfeeding and pregnant workers.

Where such risks are identified, either through risk assessments, health declarations, or existing management processes, appropriate adjustments must be implemented to reduce exposure. This is especially important during periods of amber or red heat alerts, when the likelihood of harm is significantly increased.

Where it is not reasonably practicable to reduce the risk through adjustments to the working environment or task (e.g. changes to duties, working hours, or location), managers must seek further advice to determine appropriate next steps. Managers should consult their Human Resources Business Partner where concerns remain about an individual's ability to work safely in hot conditions.

HR will work in collaboration with the Health Safety and Wellbeing Team and, where appropriate, the Occupational Health Service to identify suitable control measures or adjustments. This may include temporary modification of duties, relocation to a cooler environment, flexible working arrangements, or, in some cases, temporary removal from risk.

6. Safety Guidance for Hot Weather Working

6.1 General Principals

Working in hot weather presents risks not only from direct sun exposure but also from elevated temperatures in indoor and outdoor environments. Without appropriate controls, these conditions can lead to heat stress, reduced performance, and heat-related illness.

All managers and staff must take reasonable steps to recognise, assess, and control risks associated with hot weather.

6.2 Applying Controls

Appropriate control measures must be implemented when working in hot conditions. These should focus on preventing or reducing exposure, supporting hydration, and enabling effective cooling. Measures should be proportionate to the level of risk and reviewed regularly, particularly during periods of elevated heat alerts.

6.3 Guidance for Managers

6.3.1 Risk Assessment and Planning

Managers must ensure that the risks associated with hot weather are identified through suitable and sufficient risk assessments. This may be:

- A specific hot weather risk assessment, or
- Incorporated into existing task/activity risk assessments

Managers should consider that wearing PPE during a heatwave increases the risk of heat stress by trapping heat and limiting the body's ability to cool, leading to dehydration, fatigue, and potentially serious conditions such as heat exhaustion or heat stroke. The added physical burden and discomfort can reduce concentration, slow reaction times, and increase the likelihood of errors or accidents, while also causing skin irritation and reduced tolerance for wearing PPE correctly. Overall, PPE use in high temperatures creates a compounded risk by both elevating thermal strain and impairing worker performance and safety.

Particular consideration must be given to individuals or groups who may be at increased risk, including:

- Staff that are breastfeeding
- Disabled persons
- Individuals fasting or unable to maintain hydration for religious or other reasons
- Lone workers or those working at height
- Older individuals
- Pregnant workers
- Staff undertaking outdoor work or exposed to direct sunlight
- Staff working in poorly ventilated or confined environments
- Staff undertaking physically demanding tasks
- Staff working with heat-generating equipment or processes
- Those with pre-existing medical conditions or on medication

6.3.2 Control Measures

Managers should implement control measures in line with the hierarchy of control, including:

a) Planning and Scheduling

- Monitor weather forecasts and heat alerts (Met Office / UKHSA)
- Reschedule high-risk work to cooler parts of the day where possible
- Avoid or limit outdoor work between 11:00 and 15:00

b) Work Environment

- Provide or create shaded areas for rest (e.g. shelters or gazebos)
- Improve ventilation where possible (natural or mechanical)
- Reduce heat sources where practicable
- Use blinds or shading to reduce solar gain indoors

c) Work Organisation

- Introduce more frequent rest breaks
- Rotate tasks to limit individual exposure
- Reduce the intensity or duration of physically demanding work

d) Welfare and Resources

- Ensure access to adequate drinking water
- Encourage hydration and regular breaks
- Provide suitable PPE, including sun protection (minimum SPF 30 with UVA protection), hats, and appropriate clothing

e) Monitoring and Supervision

- Ensure staff are aware of this guidance
- Encourage a buddy system and active monitoring for signs of heat-related illness
- Pay particular attention to those at increased risk

6.4 Guidance for Staff

Staff must take reasonable care of their own health and safety and that of others when working in hot conditions.

Employees should:

- Drink water regularly and frequently (little and often)
- Replace fluids and electrolytes as needed (e.g. through food or isotonic drinks)
- Wear lightweight, loose-fitting, and light-coloured clothing
- Use sun protection, including SPF 30+ sunscreen, hats, and sunglasses
- Avoid direct sun exposure during peak hours (11:00–15:00) where possible

- Take breaks in cool or shaded areas
- Pace work and avoid excessive exertion
- Allow time to acclimatise to hot conditions
- Monitor themselves and colleagues for symptoms of heat-related illness and report concerns promptly

Where symptoms of heat-related illness occur, staff must stop work, seek a cool environment, and inform their manager.

6.5 Preventing Heat-Related Illness

6.5.1 Key Preventative Measures

To reduce the risk of heat exhaustion or heatstroke:

- Maintain adequate hydration throughout the day
- Take regular rest breaks, especially during physical work
- Keep the body cool (e.g. use water, cool environments, or fans)
- Wear suitable clothing to aid heat loss
- Avoid alcohol and excessive caffeine
- Avoid unnecessary strenuous activity during hot conditions

6.5.2 Hydration and Cooling

Maintaining hydration is essential to support the body's natural cooling mechanisms. Staff should drink fluids regularly, even if not thirsty, and take proactive steps to remain cool.

6.5.3 Sunscreen

Sunscreen should be used as part of a range of control measures when working outdoors or in conditions where exposure to direct sunlight cannot be adequately avoided. It is particularly important where staff are unable to remain in the shade or fully cover exposed skin.

Sunscreen should not be relied upon as the sole protective measure, nor used to justify prolonged exposure to the sun. It should be used in combination with other controls such as protective clothing, shade, and work scheduling to reduce overall risk.

a) Sun Protection Factor (SPF)

Sun Protection Factor (SPF) indicates the level of protection a sunscreen provides against ultraviolet B (UVB) radiation, which is responsible for sunburn. Broad-spectrum products also provide protection against ultraviolet A (UVA) radiation, which contributes to skin ageing and cancer risk.

For occupational use, sunscreen should meet the following minimum standard:

- SPF 30 or higher
- Broad spectrum (UVA and UVB protection)
- UVA rating of 4 or 5 stars (or equivalent high protection standard)

No sunscreen provides complete protection; therefore, it must be used alongside other control measures.

To ensure effectiveness:

- Apply sunscreen generously to all exposed skin before exposure
- Reapply regularly (at least every 2 hours) and after sweating or washing
- Pay particular attention to commonly missed areas (e.g. neck, ears, hands, forearms)

b) Hazards & Limitations

Some individuals may experience:

- Skin irritation or allergic reactions
- Exacerbation of existing skin conditions

These factors should be considered during the risk assessment process when identifying sunscreen as a control measure.

Certain work activities may affect the suitability or safe use of sunscreen, including:

- Exposure to dusts (e.g. cement or silica), where sunscreen may cause particles to adhere to the skin, increasing the risk of irritation or chemical burns
- Tasks requiring grip or manual dexterity, where sunscreen may make hands slippery if not fully absorbed
- Work involving machinery, tools, or working at height, where reduced grip may introduce additional safety risks

In such cases, alternative or additional controls (e.g. protective clothing) should be considered.

c) Selection & Provision

Sunscreen used for work activities should:

- Be SPF 30 or higher
- Provide broad-spectrum protection (UVA and UVB)
- Be water and sweat resistant where appropriate
- Be within its expiry date

Where sunscreen is identified as a control measure through risk assessment, it must be provided by the University and made readily available to staff.

Managers should ensure that staff:

- Have access to suitable products
- Understand how and when to apply sunscreen
- Are aware of its limitations as a protective measure

7. Further Information

The following sources provide authoritative guidance on working safely in hot weather and managing thermal risk:

Health and Safety Executive (HSE)
The HSE provides guidance on workplace temperature, thermal comfort, and managing heat stress, including:

- Workplace temperatures and employer responsibilities
  Heat stress guidance: *Heat stress in the workplace (INDG451)*
- Thermal comfort information and frequently asked questions

NHS (National Health Service)
The NHS provides public health advice on recognising and managing the effects of hot weather, including:

- Heatwave guidance and advice on staying safe

UK Health Security Agency (UKHSA) and Met Office
Joint guidance is available on heat-health alerts, weather warnings, and the impact of high temperatures on health:

- Heat-health alerts and safety advice
- Severe weather warnings and preparedness information

See also:

- **Business Continuity Management Policy**
- **Business Continuity Plan**

8. Document Control

Document title:	Guidance on Working in Hot Weather
Document ID code:	HS G103
Date approved:	22nd June 2026
Approving body:	Health, Safety & Wellbeing Team
Last review date:	N/A
Revision history:	v2.0 – June 2026 v1.0 – July 2022
Retention Period:	5 years after superseded
Next review date:	June 2029
Related documents:	https://www.sussex.ac.uk/hso/hsoatoz
Document Owner:	Health, Safety & Wellbeing Team, HR Division
Point of Contact:	Katie Bennett