WELSHPOOL
TOWN COUNCIL

Welshpool Town Council

Workplace Temperature Policy.

The Workplace (Health, Safety and Welfare) Regulations require employers to provide a reasonable indoor temperature in the workplace.

This depends on the work activity and the environmental conditions.

The Construction (Design and Management) Regulations require reasonable workplace temperatures for indoor areas of construction sites.

Where the site is outdoors, employers must provide protection from adverse weather. Site rest facilities must also be maintained at an appropriate temperature.

Assessing the risks

Under the Management of Health and Safety at Work Regulations, employers must:

- assess the risks to workers
- put controls in place to protect them

Temperature in the workplace is one of the risks employers should assess, whether the work is being done indoors or outdoors.

Line managers/Town Clerk should consult with employees on the best ways to cope with high or low temperatures.

Minimum workplace temperature

The Approved Code of Practice on the Workplace (Health, Safety and Welfare) Regulations suggests the minimum temperature for working indoors should normally be at least:

- 16°C or
- 13°C if much of the work involves rigorous physical effort

Higher workplace temperatures

There is no maximum temperature for workplaces.

However, all employees are entitled to an environment where risks to their health and safety are properly controlled.

Heat is classed as a hazard and comes with legal obligations like any other hazard.

What is a reasonable working temperature?

Line managers/Town Clerk must decide what a reasonable temperature should be in the workplace:

- assess the risk
- act on any findings by putting controls in place, including temporary or seasonal ones
- use the heat stress checklist (attached) if employees are at risk from extreme temperatures

Heat stress checklist taken from -

https://www.hse.gov.uk/temperature/employer/the-law.htm

Heat Stress Check List

This check list is only to be used when conducting a heat stress risk assessment it should not be used for the purposes of a thermal comfort risk assessment.

Risk Assessment Work Sheet

- Please complete one risk assessment worksheet for each employee.
- Read the questions carefully, and provide an answer in the relevant space provided.
- If you require further information, refer to the relevant web pages.

Name of risk assessor:	
Date of assessment:	
Job being assessed	
Location of assessment	
Name of employee being assessed	

Personal status of employee

Employees age		Is the employee male or female	Male / Female
Is the employee acclimatised:	Yes / No	If Yes provide details of acclimation:	

Is the employee experienced in the job?	Yes / No
Is the employee experienced in working in the heat?	Yes / No
Has the employee been trained to work in the heat?	Yes / No

Please provide a brief description of the work being performed: How many employees are involved in this task?	

Where was the assessment conducted? (Please provide a description of the workplace. If necessary use the back of the page to provide a diagram of the workplace and the area)

How long (in minutes) does the work typically take?	a) Without a break:
	b) In a typical shift (excluding breaks):
How often will this task take place:	Daily / Infrequently
Is refresher training given to employees?	Yes / No
If YES how often?	

What were the external climatic conditions? (If measurements are not available, provide a brief description).	Air temperature:	
	Radiant temperature:	
	Air velocity:	
	Relative humidity:	
	Description:	

Hazard Identification

Name of risk assessor:	
Date of assessment:	
Job being assessed	
Location of assessment	
Name of employee being assessed	

This observational check list helps identify potential heat stress hazards. If you observe any of the hazards described, tick the box to the right of that description.

If you identify a heat stress hazards not listed, describe the hazard in the "Other" box, and tick the appropriate answer.

Consideration	Description	Tick
Air Temperature	• Does the air feel warm or hot?	
Radiant Temperature	• Is there a radiant heat source present eg the sun, furnaces; ovens; kiln walls, kilns; dryers; hot surfaces & machinery, exothermic chemical reactions, molten metals, etc.)	
Humidity	• Is there any equipment that produces steam?	
	• Is the workplace affected by external weather conditions?	
	• Are the employees wearing PPE that is vapour impermeable?	
	• Do your employees complain that the air is humid?	
Air Movement	• Is warm or hot air blowing onto your employees	
Metabolic rate	• Is the work-rate moderate to intensive?	
PPE	• Is PPE being worn to protect against harmful chemicals, asbestos, flames, extreme heat etc?	
	• Is respiratory protection being worn?	
What your employees think	• Do your employees think that heat stress is a problem?	
	• Do your employees complain of feeling warm or hot?	
Other		

If you have ticked any of the descriptions to any of the above questions there may be a heat stress risk and you should now conduct a more detailed risk assessment using the heat stress observation checklist.

Personal Risk Factor Checklist

Name of risk assessor:	
Date of assessment:	
Job being assessed	
Location of assessment	
Name of employee being assessed	

This is not intended to replace a medical examination and is only to be used as a preliminary observation tool. If in doubt, seek advice from an occupational health physician who has a knowledge of working in the heat.

Has the employee had a pre-exposure medical examination by a qualified occupational health professional?		Yes / No
If **YES**:	Have they been cleared to work in an environment where they may be at risk from heat stress	Yes / No
If **No**	Consult a physician	
	When was their last medical screening done?	
	When is their next medical screening due?	
Before this assessment had the employee completed a pre-exposure medical questionnaire?		Yes / No
If **YES**:	Were any **YES** answers provided in the pre-exposure medical questionnaire?	Yes / No
(If **YES** consult a physician?)		
When was the questionnaire last administered?		
Please provide any other information that may be relevant to this part of the assessment.		

Heat Stress Observation Checklists

- Each of the following check lists addresses one of the one of the six basic parameters.
- Each parameter is described and a risk score is given for each. The higher the score, the higher the risk it may contribute to heat stress.
- You should observe the environment, taking note of the description provided, and tick the box that best fits your workplace. This will provide you with an estimated risk score for that parameter. You may tick more than one box if the environment is changing, or if the employee is moving between environments.
- If you do not see a description that best fits the work situation you are assessing, or are unsure then tick the "**Don't know**" box at the bottom of that table. This introduces an uncertainty into the assessment and requires that you conduct a more detailed qualitative assessment.

Air Temperature

What is air temperature and what should you look out for?

- Air temperature is described as the temperature of the air surrounding an employee.
- Consider the air temperature surrounding the employee and how you would describe it.

Subjective description of air temperature	Score	Tick
• Cool	-1	
• Neutral	0	
• Slightly warm	1	
• Warm	2	
• Hot	3	
• Very hot	4	
	Don't Know	

Radiant Temperature

What causes radiant temperature and what should you look out for?

- Thermal radiation is the heat that radiates from a heat source and will be present if there are heat sources in an environment.
- Examples include: the sun, electric fires; furnaces; ovens; kiln walls; cookers; dryers; hot surfaces & machinery, exothermic chemical reactions, deep mine tunnel walls; molten metals, etc.
- Observe the surroundings and identify heat sources. Consider how close your employees are to these heat sources. Do they need to wear protective clothing to prevent burns etc?

Subjective description of radiant temperature	Score	Tick
• Objects colder than the surrounding air are near to worker.	-1	
• There are no heat sources in the environment	0	
• A heat source is present but the employees are not in close proximity to it. • The heat source surface is warm to touch and there is no risk of contact burns.	1	
• The heat source surface is hot to touch. • Employees feel hot when they stand near the heat source.	2	
• The heat source surface is very hot to the touch and may burn the skin. • Employees cannot work in close proximity to the heat source for more than 10 minutes without wearing PPE.	3	
• Contact with the heat source will cause burning. • Employees cannot work in close proximity to the heat source for more than 5 minutes without wearing PPE.	5	
• Workers are not permitted to work in the environment without PPE to protect them from the radiant heat in that environment.	6	
	Don't Know	

Air Velocity

Air velocity explained

- Air velocity is the speed of air moving across an employee and may affect the employee if it is not cooler than the environment.
- To help you, four categories of air velocity are provided. They are **Still, Low, Moderate** and **High**
    1. **Still** air, is where there is no noticeable flow of air;
    2. **Low** air speed, is when you can just feel air movement on exposed flesh;
    3. **Moderate** air speed, is when you can feel air movement (e.g. a light breeze) on exposed flesh;
    4. **High** air speed, may be similar to the air speed on a windy day, or at or near fans or other machines or equipment that generate air movement.
- Things to look out for are wind sources; the presence of fans to reduce the temperature (e.g. during specialist maintenance work?); employees feeling hot or warm air blowing on any exposed skin or is the moving air cooler or warmer than the ambient air temperature.

Subjective description of air velocity	Score	Tick
• Cold air at a high speed (e.g. employees standing in front of an air conditioning unit).	-3	
• Cold air at a moderate speed, or • Cool air at a high speed.	-2	
• Cold air and low air speed, or • Cool air at a moderate air speed	-1	
• Still air in a neutral environment	0	
• Warm air and low air speed.	1	
• Still air in a warm environment	2	
• Still air in a hot environment.	3	
• Warm air at a moderate air speed, or • Still air in a very hot environment, or • Hot air and moderate air speed.	4	
• Very hot air at a high speed	5	
	Don't Know	

Humidity

Humidity explained

- When water is heated and evaporates into the air this provides the environments humidity. High humidity environments contain a lot of water vapour and this is important as it reduces the ability of sweat to evaporate from the skin which is the main means by which your employees lose heat.
- When **vapour impermeable PPE is worn**, sweat cannot evaporate and increases the humidity inside the PPE. If an employee is wearing this sort of PPE (e.g. asbestos, chemical protection suits etc) the humidity within the microclimate of the garment may be high.
- Humidity is very difficult to estimate. Profuse sweating may be an indication of high humidity, but it may also be an indication of a high physical activity.
- Things to looks out for are is the environment susceptible to outdoor conditions, especially in summer? Are there any dryers or other machines producing steam? Do workers complain about the humidity? Are they wearing vapour impermeable PPE?

Subjective description of air velocity	Score	Tick
• No humidity. Air is dry, with no drying processes or other mechanisms for increasing the humidity in the workplace.	0	
• Humidity seems to be somewhere between very humid and very dry.	2	
• Air is very humid. Examples may be near drying machines, laundry machines, chemical processes where steam is given off.	5	
• Vapour impermeable PPE is worn	6	
	Don't know	

Clothing

Clothing explained

- Clothing interferes with our ability to lose heat to the environment. Where heat stress is a risk eg where workers may be wearing PPE, even if the environment is not considered warm or hot. It is important to identify whether the clothing the employee is wearing may contribute to the risk of heat stress.
- It is impossible to list or describe all the clothing that may be worn in industry so only general descriptions of clothing are provided.
- Observe the employee and select the clothing type that best represents what is worn in that workplace. Where employers wear or remove clothing depending on the job or task, it may be necessary to conduct a quantitative heat stress risk assessment.
- Additional information may be obtained by contacting the manufacturer or supplier of the PPE for further advice.

Subjective descriptions of clothing	Score	Tick
• Shorts and a T-shirt. No protective or work clothing worn	-1	
• Light work clothing	0	
• Cotton coverall, jacket	2	
• Winter work clothing, double cloth coveralls, water barrier materials.	3	
• Light weight vapour barrier suits	5	
• Fully enclosed suit with hood and gloves.	6	
	Don't know	

Work Rate

Work rate explained

A, knowledge of the work or metabolic rate, is important when conducting a heat stress risk assessment. The more physical work performed, the more heat produced and the more heat that needs to be lost to prevent overheating.

Observe your employees, note their movements, posture, speed, effort, weight of materials they handle, parts of their bodies responsible for their movement etc? Review your manual handling assessment for information of the components of the task.

Five categories of metabolic rate are described:

1. **Resting,**
2. **Low,**
3. **Moderate,**
4. **High**
5. **Very High.**

Subjective descriptions of work rate	Score	Tick
Resting • Employee is resting as part of a work/rest schedule or is awaiting instructions etc.	-2	
Low • Sitting or standing to control machines • Light hand work (writing, drafting, sewing, bookkeeping, drafting etc). • Hand and arm work (small bench work, using tools such as table saws; drills, inspecting, assembling or sorting light materials, operating control panels, turning low torque hand wheels, very light assembly operating etc). • Standing with light work at machine or bench while using mostly arms (drill press, milling machine, coil taping, small armature winding, machine with light power tools, inspecting or monitoring hot processes). • Arm and leg work (driving a car, operating foot pedals or switches). • Walking in easily accessible areas (can walk upright). • Lifting 4.5 kg loads for fewer than 8 lifts/min; 11 kg few than 4 lifts/min	0	
Moderate • Hand and arm work (mailing filing) • Arm and leg work (off road operations of trucks, tractors and construction equipment). • Arm and trunk work (operating air hammer, tractor assembly, cleaning or clearing light debris spillage, plastering, heavy welding, scrubbing while standing up, intermittently handling heavy objects, weeding, hoeing, picking fruit and vegetables). • Carrying, lifting, pulling and pushing light loads (lightweight carts and wheelbarrows); • Operating heavy controls (e.g. opening valves); • Walking in congested areas (limited headroom), walking 2 to 3 mph. • Lifting: 4.5 kg fewer than 10 lifts/min, 11 kg fewer than 6 lifts/mins	2	
High • Intense arm and trunk work, (sawing by hand or chiselling wood, shovelling wet sand, transferring heavy materials, sledge hammer work, planting, hand mowing, digging). • Intermittent heavy lifting (such as pick-and-shovel work). • Pushing or pulling heavy loads (pallet trucks, skips, loaded cages, heavy wheelbarrows). • Heavy manual handling and lifting (e.g. laying concrete block, and clearing heavy debris (e.g. cleaning and relining reactor vessels)). • Heavy assembly work on a non-continuous basis. • Lifting: 4.5 kg 14 lifts/mins; 11 kg 10 lifts/mins.	4	
Very High • Work at this rate cannot be sustained for long periods • Very intense activity at a fast maximum pace (e.g. intense shovelling, axe work, running). • Heavy assembly, building or construction work; (climbing stairs, ramps or ladders rapidly) • Walking faster than 4mph • Lifting 4.5 kg more than18 lifts/min. 11 kg more than 13 lifts/min	6	
	Don't know	

What to do with results from Observations check list

Referring back to each of the parameters you have just observed please tick the score which corresponds to the score you gave each parameter.

The black squares indicate that the score is not available for a particular category For example, Metabolic Rate can only achieve scores of -2, 0, +2, +4 and +6

Where you have a score higher than 1 the greater the heat stress risk. As the scores increase (also shown by colour shading from light red to dark red) so the risk of that parameter contributing to heat stress increases. If three or more of your scores are greater than 1, there may be a risk of heat stress.

If you score greater than 5, then in these situations, physiological monitoring may be required. If you are not competent in measuring, analysing and interpreting physiological measurements you should now seek expert advice.

	SCORES										
	-3	-2	-1	0	1	2	3	4	5	6	Don't know
Air temperature	■	■							■	■	
Radiant heat	■	■								■	
Air velocity										■	
Humidity	■	■	■		■		■	■			
Clothing	■	■			■			■			
Metabolic rate	■		■		■		■		■		