

**Workplace Temperature**

The following is intended for all SoR health and safety reps who are concerned about temperature in their place of work.

Temperature is certainly a health and safety issue. Too much heat can cause fatigue, extra strain on the heart and lungs, dizziness and fainting, or heat cramps due to loss of water and salt. Hot, dry air can increase the risk of eye and throat infections.

Above a blood temperature of there is 39°C/102°F a risk of heat stroke; collapse can occur above 41°C/106°F with symptoms of delirium and confusion. This condition can prove fatal and survivors may suffer from organ damage.

Tiredness and loss of concentration can also lead to an increased risk of accidents.

Too much cold can mean chilblains, Reynaud’s, white finger, or frost bite. The body keeps the blood supply to the extremities closed at lower temperature to conserve heat. Cold conditions can also lead to fatigue since the body uses energy to keep warm. There is an increased risk of accident due to numb fingers, obstruction by protective clothing etc. Extreme cold for long periods can lead to hyperthermia, loss of consciousness, and eventually coma. If the body drops below, 18°C/64°F the heart stops.

Whilst these problems are caused mainly by extremes of temperatures, less severe but wrong workplace temperature can cause discomfort, loss of concentration, irritability and tiredness, etc.

**What is an acceptable temperature?**

There are various informal guides to a safe working temperature. Generally, the acceptable area if comfort for most types of work lies between 16°C to 24°C/61°F to 72°F.

The Chartered Institute of Building Services Engineers recommends that the following temperatures for different working areas:

* Hospital wards and shops: 18°C/64°F
* Office and dining rooms: 20°C/68°F.

The approved code of practice (ACOP) under the Workplace (Health Safety and Welfare) Regulations 1992 (as amended), (WHSWR 1992) states that work rooms should normally be at least 16°C/61°F for most types of work; and at least 13°C/55°F for work involving “severe physical efforts”.

In common circumstances, which apply to SoR members, the 13°C/55°F and16°C/61°F are legally enforceable minimum requirements, and workers have the effective right to refuse to work where the workplace temperature is below them. There is usually an assumption that no action should be taken if the correct temperature is achieved within an hour of starting work.

An employer must provide a working environment which is, as far as reasonably practicable, safe and without risks to health. In addition, employers have to assess risks and introduce any necessary prevention or control measures.

**What this means in practice: Cold.**

Regulation 7 of the WHSWR 1992 states that the “temperature in all workplaces inside buildings shall be reasonable during working hours”. A “reasonable temperature” is defined in the accompanying ACOP as that which provides reasonable comfort without special clothing and should normally be at least where 16°C/61°F or at least 13°C/55°F much of the work involves physical effort (such as repeated exertion to the extent that a temperature of 16°C would be uncomfortably warm). The ACOP stipulates that where maintaining these standards is impractical then employers must take all reasonable steps to achieve a comfortable temperature as close to them as possible.

The Health and Safety Executive guidelines say that the temperature requirements of both sets of legislation can be met by “maintaining a ‘reasonable’ temperature of at least (or 16°C at least if 13°C the work involves physical effort) throughout the workroom.”

**What the law says: Heat**

Over time people adapt to hot conditions by sweating more, and by changing behaviour to try and cool down, e.g. removing clothing, taking cool drinks, fanning themselves, sitting in the shade or cool area, and/or reducing their work rate. However, in many work situations such behaviour changes for members may not be possible.

The SoR along with other trade unions is campaigning for a simple, legally enforceable, maximum temperature.

However, in the absence of one, the SoR members are not left unprotected.

At the workplaces of all SoR members, the employer must under the law provide a working environment which as far as is reasonably practicable, is safe and without risks to health, and which has welfare facilities (s2(2)(e) of the Health and Safety at Work Act 1974 (HSWA 1974).

Employers must assess risks and introduce prevention and control measures based on those assessments under the MHSWR 1999.

During working hours, the temperature inside buildings must be reasonable (Regulation 7 of WHSWR 1992). The ACOP to these regulations says that “all reasonable steps should be taken to achieve a comfortable temperature” for example:

* Insulating hot pipes and equipment;
* Providing air cooling plants;
* Shading windows;
* Positioning workstations and equipment away from hot areas;
* Using fans and increased ventilation in hot weather;
* Providing local cooling in individual workstations, and
* As a last resort in unavoidably hot work areas, providing rest facilities and limiting the amount of times individuals spend in the heat.

Unfortunately there is no maximum temperature for workers although the WHSWR 1992 state the temperature inside workplace buildings must be ‘reasonable’. In addition, the approved code of practice to these regulations states that ‘all reasonable steps should be taken to achieve a comfortable temperature’.

The Code of Practice also says that:

* other factors such as protective clothing, physical activity, radiant heat, humidity, air movement, and the length of time a person is doing a job must all be taken into account when assessing what a “reasonable temperature” is,
* “methods of cooling must not produce harmful or offensive fumes, gases or vapors”, and
* “A sufficient number of thermometers must be provided to enable workers to check temperatures in indoor workplaces”.

Thermometers need not be provided in each workroom, but if the temperature in a particular workroom is uncomfortable, insist that the temperature in that room be measured.

**Regulation 6** of WHSWR 1992 requires employers to provide “effective and suitable ventilation”. To be effective, fresh air must be drawn in from outside and diluted with the warm humid air inside, creating movement and a sense of freshness without causing a draught. Humidity and ventilation must be at levels, which do not cause discomfort to or sore eyes.

**Regulation 22** requires employers to provide an adequate supply of wholesome drinking water and cups, readily accessible and conspicuously marked.

* Heat from VDU's, etc. Equipment – The Display Screen Equipment Regulations 1992 require that “equipment belonging to any work stations shall not produce excess heat which could cause discomfort to operators or users”.
* Manual Handling – Risk assessments carried out under the Manual Handling Operations Regulations 1992 require employers to take account of risks from various factors listed in Schedule 1 which includes hot and humid conditions.
* Wearing Protective Clothing in Hot Weather – The Personal Protective Equipment (PPE) at Work Regulations 1992 require employers to select PPE that is suitable for the risks, for the employees who will be using it, and for the working environment. So where PPE has to be used in hot weather, it should be designed to allow workers to keep as cool as possible. Workers should not just be expected to use the cheapest thing available.
* Young Workers – must not be employed if they are likely to be exposed to extreme cold or heat (MHSWR 1999).
* Pregnant Workers – employers must specifically assess the risks to pregnant women, including extremes of heat (MHSWR 1999). The Health and Safety Executive’s Guide on “New and Expectant Mothers at Work” says: - “When pregnant, women tolerate heat less well and may more readily faint or be more liable to heat stress. The risk is likely to be reduced after birth but it is not certain how quickly an improvement comes about”. And - “Breastfeeding may be impaired by the heat dehydration”.

To avoid the risks, the HSE says:

* “Pregnant workers should take great care when exposed to prolonged heat at work”, and - “Rest facilities and access to refreshments would help”.
* Stress at Work – The HSE’s Guidance on “Stress at Work” says that poor physical working conditions including extremes of temperature contribute to stress.

**Steps that an employer take**

There are many steps which employers may take to assess risk and provide more comfortable working during hot weather. These include:

* carrying out a survey which takes account of temperature, humidity, air movement and workload (carried out at the hottest part of the day, and the hottest part of the year);
* providing adequate ventilation, fans, and windows that can be opened (but above 27°C/80°F fans are ineffective at cooling the air);
* providing portable air cooling cabinets, which may reduce the air temperature by up to 6°C/11°F;
* providing properly designed ventilation, air conditioning will be most effective, and ensuring it is properly maintained so it does not break down in the middle of a heat wave;
* re-designing the job or work area to isolate staff from the source of heat as much as possible;
* reducing heat gain via windows by reflective film or blinds, and by reducing window area, and moving desks and workstations away from windows;
  + getting a competent heating and ventilation engineer to do a full survey of temperatures, heat stress, and ventilation systems etc, and then to recommend a permanent solution to problems. Engineers should be registered with an authoritative body such as the Chartered Institute of Building Services.
  + training and information for relevant staff in recognising heat stress symptoms;
  + allowing staff to dress appropriately for hot weather, e.g. allowing ties, tights or jackets to be removed or shorts to be worn;
  + if it is impossible to provide a comfortable air temperature, or as a temporary measure until a permanent solution is put in place, reducing staff exposure to heat. This can be done through frequent rest breaks in a cool area where cold drinks are provided, job rotation, or altering work during the hottest part of the day;
  + giving priority to pregnant women and those with medical conditions for rests and early leave from work;
  + taking the hottest rooms out of service is another temporary measure;
  + review work rate – the harder someone works the greater the amount of body heat generated.

**What can safety representatives do?**

There are a number of positive steps that safety representatives can take to raise awareness and tackle workplace health, safety and welfare. Safety representatives should check that their employer is observing their responsibilities under the WHSWR 1992 and the MHSWR 1999.

Safety representatives can identify if there is a problem by involving members and carrying out a survey or doing a special inspection of the workplace. There is a checklist, at **Annex 1**, on temperature, humidity and ventilation which safety representatives can use.

Specific problems should then be identified and raised with the employers with a view to getting action. In the short term, this could include mobile air conditioning units and heaters, but in the long term some structural alterations may be necessary to resolve the problem.

Then seek a joint agreement with the employer. This should include:

* a definition of a minimum temperature;
* a definition of a maximum temperature;
* a definition of “reasonable and adequate” taking into account: the building, the number of people, the equipment used, and the jobs undertaken,
* a planned response to sudden changes in the weather, and
* what will happen when the minimum or maximum temperatures are not maintained;
* relaxing dress codes in the summer redesigning work area;
* allowing staff to be more flexible in their working arrangements;
* Introducing air conditioning system.

Safety representatives should ensure that their employer has done an adequate risk assessment and taken control measures to ensure that no worker suffers from dehydration or heat stress.

**FURTHER INFORMATION AND ADVICE**

The TUC ‘Work smart’ website contains a lot of practical information and advice for workers on temperature and hot weather. Go to [www.worksmart.org.uk](http://www.worksmart.org.uk).

The Health and Safety Executive have some excellent advice on working in hot environments. Go to [www.hse.gov.uk/temperature](http://www.hse.gov.uk/temperature)

**Annex 1**

**Checklist for temperature, humidity and ventilation**

1. One way to identify a problem is by talking to your members or doing a survey. This may also build support for solving the problem. You could ask them:

* do they find it too hot or too cold at work?
* does this happen at a particular time of year?
* do they notice any draughts at work?
* are there any problems with heating/cooling systems?
* do they suffer regularly from colds, catarrh, coughs, sore throats?
* do they find the air too dry?

2. Make an inspection of temperature and heating and cooling systems. Many workplaces can be too cold for comfortable working, particularly in winter. What is the average temperature in your workplace and is there a thermometer available to measure it? Aree there any means of checking the relative humidity?

3. Is the atmosphere hazy, oily or fume and dust laden? If so:

* are there sufficient air movements by general ventilation (windows, doors, vents)?
* is any provision made for mechanical ventilation by fans, exhaust ventilation or other air-cleaning equipment?
* are there maintenance and cleaning programmes for ventilation equipment?

4. Draw up a list of the main problems with heating and ventilation, hot work and cold work and humidity levels.

5. Draw up a leaflet about temperature, ventilation and humidity problems to start off discussions with members.

6. Prepare a draft agreement on temperature control, ventilation and humidity requirements for your workplace.

7. Prepare a report for management. Set out your aims and a plan of action on temperature, ventilation and humidity problems.