

# Temperature at Work

There is no legal maximum working temperature but the law requires employers to ensure "the temperature in all workplaces inside buildings shall be reasonable". The law on minimum temperatures is clear and unambiguous: 13 degrees C for strenuous work, 16 degrees C generally. The GPMU wants legal maximum temperatures set in the same way as minimum temperatures - at 27 degrees C for strenuous work and 30 degrees C generally. This indicates the kind of temperatures that should trigger action to reduce the effects of high temperatures at work.

## Heat at Work

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, and breathing problems such as asthma and rhinitis.

Above a blood temperature of 102 degrees F there is a risk of heat stroke; collapse can occur above 106 degrees F with symptoms of delirium and confusion. Such temperatures are rare, but can be reached in hot workplaces in paper mills, on particular processes and confined spaces generally.

Most of the effects of heat at work are not so serious, but they can still cause problems.

## Common effects

The police report that heat waves bring in their wake outbursts of violence, often directed at people working with the public.

The loss of concentration brought on by the heat doesn't just slow you down, it can lead to accidents, such as people being careless around machinery, or stumbling against hotplates.

Having to work (and travel) in hot weather pushes-up people's stress levels, making all the health effects of stress at work more likely - stomach problems, disrupted sleep patterns and heart disease.

## Jobs affected

People who work in the heat already are at increased risk of heat exhaustion when the outside temperature goes up.

People who work in hazardous occupations already, and who have to keep their wits about them to avoid injury are less likely to be able to in the heat. People working with almost any machinery are at risk.

## The Law

At present, there are fairly explicit laws on minimum temperatures, but not on maximum temperatures.

All employers are under a general duty to look after the health and safety of their staff (Health and Safety at Work

etc Act 1974), and to ensure that during working hours the temperature in all workplaces inside buildings is reasonable (Workplace Health, Safety and Welfare Regulations 1992). In addition, employers have to assess the risks to workers of a variety of hazards, including temperature (Management of Health and Safety at Work Regulations 1992).

The law requires thermometers to be available to enable workers to check the temperature.

There are various informal guides to safe working temperatures, and generally, the acceptable zone of thermal comfort for most types of work lies between 16 degrees C - 24 degrees C (about 61 - 72 F).

Acceptable temperatures for heavier types of work are concentrated at the lower end of this range, while sedentary tasks may still be performed with reasonable comfort towards the opposite extreme.

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

heavy work in factories 13 degrees C  
light work in factories 16 degrees C  
offices or dining rooms 20 degrees C

## What the law says about cold

The Approved Code of Practice under the Workplace (Health, Safety and Welfare) Regulations 1992 states that workrooms should normally be:

at least 16 degrees C for most types of work; and  
at least 13 degrees C for work involving "severe physical effort".

These levels are legally enforceable minimums, and workers have the effective right to refuse to work when the workplace temperature is below them. Chapels should reach agreements with employers on these matters. It is normally accepted that no action should be taken if the correct temperature is achieved within an hour of starting work.

## What Chapels should expect

The GPMU believes that workers should be protected from having to work in uncomfortably hot conditions in the same way as they are protected from the cold. For most workers, the main reason for heat exposure at work is high temperatures due to the weather, inadequate ventilation and so on. The general duties of health and safety law mean that some precautions can and must be taken.

Work which necessarily involves heat at work should be minimised, or workers' contact with it reduced (for example by enclosing the hot operation, by use of remote control devices etc).

Workers whose exposure to heat cannot be reduced should be provided with adequate breaks and facilities to

cool them down, including personal cooling equipment or cooling air flows. In many cases more breaks than normal will be needed. They should be taken in cool areas. Cool drinks should also be provided.

## Controlling Heat Hazards

There are a number of basic approaches to tackling heat hazards at work. All involve reducing exposure by keeping heat away from workers. The source of the heat can be isolated. For example, fuel for boiler furnaces can be fed in by machine. Automation can be used for some very hot work. Sources of the heat can be insulated. But insulation must be properly designed and many insulation materials create hazards of their own. Controlling heat loss can also prevent waste and may save money.

Radiant heat can be screened by using heat reflecting shields, or water cooled heat-absorbing panels. Heat from sunlight can be shaded through large windows or glass roofs, by blinds or whitewash. To cool hot air and regulate humidity, ventilation systems can be used. Finally if there is no other way of controlling the heat then work breaks and job rotation can be used.

In some circumstances protective clothing can be used but this should be regarded as a last resort or a temporary measure. It can be cumbersome, uncomfortable, ineffective and can cause accidents. Thick clothing made from insulation materials can temporarily prevent heat getting through to your body. Aluminised suits and aprons give greater protection against radiant heat. Otherwise lighter clothing is better since it allows the body to be cooled by air currents and sweating.

## Safety Rep Action

The Approved Code of Practice to the Workplace (Health, Safety and Welfare) Regulations states 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;

siting workstations away from hot areas; and

using fans and increased ventilation in hot weather.

As a first step, Safety Reps should raise with their employers the problems created by high temperatures at work. The GPMU expects employers to consult Chapels and their Safety Reps about measures to reduce the temperature.

Before serious problems relating to heat actually arise, it would be sensible for companies and Chapels to agree a policy on how to deal with hot weather. Where there is no such agreements, and GPMU members are subjected to unbearably hot conditions, Chapels should press employers to meet the law and follow the steps set out above.

### **For more detailed information see:**

- "Workplace health, safety and welfare: Workplace (Health, Safety and Welfare) Regulations 1992" Approved Code of Practice and Guidance on Regulations £5.00 (ISBN 0 7176 0413 6)

- Workplace health, safety and welfare IND(G)244(L) (Free leaflet) available by mail order from:HSE Books: 01787 881165.

See the Workplace Regulations