Ansell

THE HEAT IS ON

SAFETY BRIEFING

Despite an ability to live and function in vastly different environmental conditions, the human body is intended to operate within a very specific temperature range – **between 36.1 and 37.8°C**. Our capacity to exist outside this narrow window is made possible by inbuilt physical responses designed to maintain a regulated temperature in varying ambient conditions — a task made more difficult when the mercury climbs.

CONTRIBUTING FACTORS

Heat exposure is not limited to outdoor environments, with indoor locations also posing significant risk when workers are confined to poorly ventilated areas or heat-producing settings such as kitchens, foundries, laundries or chemical plants.

Even when relative temperatures are bearable, other external factors contribute to discomfort; humidity, a lack of air flow, radiant heat, clothing and required PPE, overall exposure times and the metabolic heat load from physical activity.

> **"In many industrial applications, workers are open to external elements including sun, heat and humidity, particularly during summer months"**

HEAT ILLNESS

Overheating makes us susceptible to heat-related illness - a general term for a series of progressively detrimental conditions.

These range from heat rash, fainting, heat cramps and heat exhaustion through to heat stroke, which can often be fatal. Higher temperatures also exacerbate pre-existing medical conditions and increase the side effects of both prescription and over-the-counter medications.

> **“Overheating makes us susceptible to heat-related illness — a general term for a series of progressively detrimental conditions”**

OTHER SAFETY ISSUES

Hot conditions produce other undesirable effects; dehydration, scalding from contact with hot surfaces and substances, tool slips caused by increased sweating, reduced concentration, confusion or otherwise impaired thinking — leading to errors, dropping tools, slipping, tripping and falling.

Certain environments may require the use of full body PPE to protect workers from additional hazards like liquid chemicals or particulates. This is problematic in higher temperatures, when workers may be inclined to forgo PPE due to discomfort, and to cut corners or abandon other safe work procedures due to fatigue.

COMBATING HEAT

There are various measures that can be employed to alleviate the risks associated with workplace heat by lessening worker discomfort.

• Provide access to cool drinking water and mandate work breaks to minimise the likelihood of dehydration, a key contributor to many heat related illnesses.
• Ensure there is adequate air movement within indoor environments or, where practical, consider providing air conditioning.
• Workers should wear lightweight, lose fitting clothing made from breathable materials.
• PPE including reflective aprons and face shields should be provided to limit radiant heat exposure.
• Outdoor workers should be provided with appropriate ultraviolet (UV) safeguards including; wide brim hats, loose-fitting long-sleeved collared shirts, long pants, sunglasses and sunscreen.

Rising temperatures may tempt workers to remove PPE, but the potential severity of heat related illness means it should never be a choice between comfort and protection. change, the assessment and selection process must be repeated. It sounds simple enough, but there are many determinants that influence the ultimate choice.

When full body PPE is required, safety managers should look for a solution constructed from air and moisture permeable (breathable) materials. Designs that incorporate a microporous polyethylene laminate material, with breathable SMS hood, back, leg and underarm panels, will help reduce the risk of heat stress and other illness while still providing appropriate protection levels against identified hazards.

The chosen solution should meet with all appropriate EN standards to ensure it has been tested against specified criteria and satisfies regulatory compliance. Where applications present specific conditions that require additional features, such as fabrication from anti-static, silicon-free or low-linting materials, be sure to check product-specific data to guarantee suitability.

While environmental conditions are largely beyond human control — particularly in summer months — safety managers should consider all additional contributing factors. Given the potentially fatal outcomes of heat related illness, workers should be provided with a full range of appropriate safeguards and defence measures to ensure the safest possible working environment.

> **"The best defence for any safety professional is appropriate identification and utilisation of hand protection that is truly fit for purpose"**

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