Safety Clothing Can Expose Workers to the Risk of Heat Stress

Employers have a basic duty to protect workers from foreseeable safety hazards. But they must be careful not to expose workers to one hazard while trying to protect them from another.

For example, a refinery in Louisiana hired a contractor to demolish piping in its sulfuric acid alkylation unit. A 45-year-old pipefitter, who was cutting pipe outdoors in four layers of clothing'including a chemical resistant encapsulating suit'died on the job. At the time, the temperature was 83øF.

The US Department of Labor's Occupational Safety and Health Administration (OSHA) investigated the incident and cited the contractor for failing to implement a heat management program. OSHA specifically noted that employer failed to take into consideration the increased heat stress caused by the specialized clothing being worn by the workers as they cut and removed the piping.

So in the contractor's well-intentioned and necessary efforts to protect its workers from contact with hazardous chemicals, it inadvertently exposed them to heat stress instead.

Other kinds of PPE, such as respirators, can also increase the risk of heat stress under certain conditions.

Bottom line: When implementing safety measures, consider the impact that such measures may have and any potential safety hazards the measures may create or exacerbate.

For example, you may require workers to wear gloves to protect their hands. But if the workers use certain kinds of machinery, make sure there's no risk the gloves could get caught or entangled in the machinery.

Visit the OHS Insider's Heat Stress Compliance Centre for tips, tools, information and other resources on protecting workers from heat stress, including:

- A recorded webinar on the importance of acclimatization and protecting workers from heat stress
- A Spot the Violation on the importation of hydration
- A supervisor daily heat stress checklist
- A heat stress self-audit checklist
- The OHS laws and heat stress.