

The risk imperative for PPE

Citing the UK Government legislation on corporate manslaughter, **Dave Frodsham** asserts that getting PPE suitable for the variety of response situations should be made a priority concern



IT IS JUST OVER 20 YEARS SINCE THE tragic fire at King's Cross, London, an event which was a watershed in the history of the development of Personal Protective Equipment (PPE) for the UK Fire and Rescue Service (FRS). Those firefighters who were wearing wool tunics and PVC leggings in 1988 must be amazed by the quality of kit that is available today.

The high level of protection offered by today's firefighting ensembles is the result of research and development, the introduction of specific performance standards and an approach that is driven by risk evaluation.

Historically, performance standards for structural kit have been developed to protect the wearer from the heat and flame that they are exposed to in the extremes of a fire. They do not necessarily take account of the variety of different tasks and environments that form part of the operational mix of duties.

CROSSTECH

While there is no question of the importance of such standards, they do not necessarily ensure that the firefighter is protected properly in every situation. In fact, there are some situations where the structural kit designed to protect firefighters is putting them at risk. There are examples of firefighters suffering from the effects of heat strain after wearing structural ensembles in long search and rescue operations on a warm day.

In recent years the FRS has rightly moved to a full risk assessment to determine its PPE solutions, recognising that what protects in one situation, may actually cause harm in a different environment. This change in risk assessment is also as a result of the success of fire prevention initiatives that have resulted in a reduction of structural fires.

Product standards often do not offer performance requirements that match identified risk. Risk assessment has become more sophisticated, the risks are changing constantly, whereas by comparison product standards tend to be slow to develop.

Protective clothing for firefighters has developed to such an extent that most fabrics provide very high levels of protection from heat



London Fire Brigade firefighters pictured during the response to the 1988 fire at King's Cross Underground Station, their uniforms showing how far things have come in terms of PPE

London Fire Brigade

and flame and it is now rare to find a component that does not meet the EU standards. Whereas a few years ago heat and flame would have been described as the highest risk, the Integrated Clothing Project's risk assessment identified injury from exposure to biological pathogens as its highest risk. This reflects both the changing role of the firefighter as well as a more sophisticated approach to risk assessment.

At Gore we recognise the importance of protecting firefighters from all eventualities and

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developed CROSSTECH fabric to deliver the kind of superior penetration resistance that will protect from biological pathogens as well as keeping the firefighter dry and protected from heat and flame. CROSSTECH fabric evolved to meet those specific needs born of modern risk assessments that recognise the need for protection against biological pathogens.

The move to a risk-based evaluation of PPE

has also resulted in new solutions that are designed specifically for the tasks firefighters undertake, ensuring that they are working with better protection than ever before.

UK Government legislation means that the implications for failing to undertake a robust risk assessment could be severe. The *Corporate Manslaughter and Homicide Act* introduced in 2008 should focus the attention of anyone that has responsibility for PPE. While FRS are exempt from the *Act* in some circumstances when responding to emergencies, they are still liable when it comes to the safety of staff and the duty owed to employees.

According to the Ministry of Justice: “The *Act* sets out a new offence for convicting an organisation where a gross failure in the way activities were managed, or organised, results in a person's death. Under a new approach, courts will look at management systems and practices across the organisation, providing a more effective means for prosecuting the worst corporate failures to manage health and safety properly. This is an opportunity to think again about how risks are managed... organisations should ensure that they are taking proper steps to meet current legal duties.”

What this means is that if any UK FRS is involved in an accident that results in a death, then anyone in the organisation responsible for procedures and policies to manage and mitigate risk will find themselves under close examination. Investigations would target not only the Chief Officer for prosecution, but any senior manager with responsibility for implementation of policy. That could be operational managers as well as health and safety and PPE managers.

The message is clear – undertake a robust risk assessment, make sure that your PPE meets those risks and review them on a regular basis. A detailed risk based approach will ensure that firefighters benefit from the best possible protection.

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