

# CHEMICAL PERSONAL PROTECTIVE EQUIPMENT (CPPE) FOR HEALTH SERVICE FIRST RESPONDERS: THE UNITED KINGDOM APPROACH

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The aim of this study was to provide appropriately specified, evidence-based, generic CPPE to all United Kingdom ambulance services and emergency departments which would provide respiratory body hand and foot protection and take into account usability. Protection requirements were defined a priori using national surveillance data for chemical incidents and advice regarding the potential chemical warfare (CW) agents that might be encountered in a deliberate release scenario. A specification was determined using relevant European Standards and incorporating additional test methodologies for performance against CW agents. The procurement of CPPE to the specification was subject to a competitive tendering process. The selection process required all potential suppliers to submit independently accredited test certificates demonstrating compliance with the specification. Samples were also supplied for CW agent testing. Additionally a cohort of twenty four test subjects wearing CPPE carried out the decontamination of standardised simulated chemically contaminated casualties for a 120-minute study period. These tests of performance in use assessed the heat stress (microenvironment wet bulb globe temperature) and heat strain (body mass loss heart rate and core body temperature) imposed by the CPPE and the subjective opinions of the test subjects regarding usability.

Upon completion of the process appropriately specified evidence-based, generic, CPPE was selected for purchase for all United Kingdom ambulance services and emergency departments. Details of the specification and selection process and the CPPE selected (incorporating a novel approach to respiratory protection) will be presented. We believe that the United Kingdom approach to the specification and selection of CPPE is relevant to health service first responders preparing for chemical incidents in other countries.