

EXECUTIVE SUMMARY

Fire fighting is inherently dangerous, and personal protective equipment (PPE) is a critical part of the gear used by fire fighters. All gear requires appropriate care and maintenance, and fire service PPE is no exception. Improper care can shorten the life of PPE and affect its performance, while cleaning gear too infrequently could influence contamination risks such as cancer.

The goal of this project is to provide a data collection summary of current practice and policies for fire service PPE care and maintenance. This project is intended to provide useful background information to help guide standards revisions and support future research addressing cleaning, decontamination, retirement, and related care and maintenance issues.

Currently, *NFPA 1851, Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting* provides requirements for the selection, care, and maintenance of structural and proximity PPE; however, it lacks specificity in certain key technical areas. Revisions to these requirements occur periodically, and the data collected by this effort is intended to assist with the on-going assessment and revision of these requirements. Further, as future research is conducted on PPE related issues such as cleaning, decontamination and retirement, it is intended that the data collected by this research study will provide helpful baseline information to better guide future research.

The primary approach to achieve the project goal is through an extensive information collection effort using online survey tools, supported by a brief review of the applicable literature and typical practices within this community. The questions in these surveys are varied, based on certain distinguishing characteristics of each of the three key stakeholder groups and in some cases soliciting personal opinions on the topics. The online surveys have been focused toward capturing pertinent information and address the following primary constituent groups and sub-groups:

- 1) Fire Service
 - a) Line (Fire Fighters)
 - b) Staff (Administration)
 - c) Those Involved as both (e.g., Line Fire Fighters with Policy Responsibility)
- 2) Independent Service Providers (ISPs)
- 3) Manufacturers

The key summary observations from this data collection effort are that the role of standards has value in providing a baseline, more education and out-reach is needed with the user community of best practices, and further research on this topic is needed. This report will be provided to the applicable NFPA Technical Committees for their consideration, along with other public input, as they continue their work the next edition of NFPA 1851.