NFPA®

1999

Standard on Protective Clothing and Ensembles for Emergency Medical Operations

2018

This is a preview. Click here to purchase the full publication.

IMPORTANT NOTICES AND DISCLAIMERS CONCERNING NFPA® STANDARDS

NOTICE AND DISCLAIMER OF LIABILITY CONCERNING THE USE OF NFPA STANDARDS

NFPA® codes, standards, recommended practices, and guides ("NFPA Standards"), of which the document contained herein is one, are developed through a consensus standards development process approved by the American National Standards Institute. This process brings together volunteers representing varied viewpoints and interests to achieve consensus on fire and other safety issues. While the NFPA administers the process and establishes rules to promote fairness in the development of consensus, it does not independently test, evaluate, or verify the accuracy of any information or the soundness of any judgments contained in NFPA Standards.

The NFPA disclaims liability for any personal injury, property, or other damages of any nature whatsoever, whether special, indirect, consequential or compensatory, directly or indirectly resulting from the publication, use of, or reliance on NFPA Standards. The NFPA also makes no guaranty or warranty as to the accuracy or completeness of any information published herein.

In issuing and making NFPA Standards available, the NFPA is not undertaking to render professional or other services for or on behalf of any person or entity. Nor is the NFPA undertaking to perform any duty owed by any person or entity to someone else. Anyone using this document should rely on his or her own independent judgment or, as appropriate, seek the advice of a competent professional in determining the exercise of reasonable care in any given circumstances.

The NFPA has no power, nor does it undertake, to police or enforce compliance with the contents of NFPA Standards. Nor does the NFPA list, certify, test, or inspect products, designs, or installations for compliance with this document. Any certification or other statement of compliance with the requirements of this document shall not be attributable to the NFPA and is solely the responsibility of the certifier or maker of the statement.

REVISION SYMBOLS IDENTIFYING CHANGES FROM THE PREVIOUS EDITION

Text revisions are shaded. A Δ before a section number indicates that words within that section were deleted and a Δ to the left of a table or figure number indicates a revision to an existing table or figure. When a chapter was heavily revised, the entire chapter is marked throughout with the Δ symbol. Where one or more sections were deleted, a • is placed between the remaining sections. Chapters, annexes, sections, figures, and tables that are new are indicated with an *N*.

Note that these indicators are a guide. Rearrangement of sections may not be captured in the markup, but users can view complete revision details in the First and Second Draft Reports located in the archived revision information section of each code at www.nfpa.org/docinfo. Any subsequent changes from the NFPA Technical Meeting, Tentative Interim Amendments, and Errata are also located there.

ALERT: THIS STANDARD HAS BEEN MODIFIED BY A TIA OR ERRATA

Users of NFPA codes, standards, recommended practices, and guides ("NFPA Standards") should be aware that NFPA Standards may be amended from time to time through the issuance of a Tentative Interim Amendment (TIA) or corrected by Errata. An official NFPA Standard at any point in time consists of the current edition of the document together with any TIAs and Errata then in effect.

To determine whether an NFPA Standard has been amended through the issuance of TIAs or corrected by Errata, go to www.nfpa.org/docinfo to choose from the list of NFPA Standards or use the search feature to select the NFPA Standard number (e.g., NFPA 13). The document information page provides up-to-date document-specific information as well as postings of all existing TIAs and Errata. It also includes the option to register for an "Alert" feature to receive an automatic email notification when new updates and other information are posted regarding the document.

ISBN: 978-145591733-4 (Print)
ISBN: 978-145591734-1 (PDF)
ISBN: 978-145591783-9 (eBook)

This is a preview. Click here to purchase the full publication.

IMPORTANT NOTICES AND DISCLAIMERS CONCERNING NFPA® STANDARDS

ADDITIONAL NOTICES AND DISCLAIMERS

Updating of NFPA Standards

Users of NFPA codes, standards, recommended practices, and guides ("NFPA Standards") should be aware that these documents may be superseded at any time by the issuance of new editions or may be amended from time to time through the issuance of Tentative Interim Amendments or corrected by Errata. An official NFPA Standard at any point in time consists of the current edition of the document together with any Tentative Interim Amendments and any Errata then in effect. In order to determine whether a given document is the current edition and whether it has been amended through the issuance of Tentative Interim Amendments or corrected through the issuance of Errata, consult appropriate NFPA publications such as the National Fire Codes® Subscription Service, visit the NFPA website at www.nfpa.org, or contact the NFPA at the address listed below.

Interpretations of NFPA Standards

A statement, written or oral, that is not processed in accordance with Section 6 of the Regulations Governing the Development of NFPA Standards shall not be considered the official position of NFPA or any of its Committees and shall not be considered to be, nor be relied upon as, a Formal Interpretation.

Patents

The NFPA does not take any position with respect to the validity of any patent rights referenced in, related to, or asserted in connection with an NFPA Standard. The users of NFPA Standards bear the sole responsibility for determining the validity of any such patent rights, as well as the risk of infringement of such rights, and the NFPA disclaims liability for the infringement of any patent resulting from the use of or reliance on NFPA Standards.

NFPA adheres to the policy of the American National Standards Institute (ANSI) regarding the inclusion of patents in American National Standards ("the ANSI Patent Policy"), and hereby gives the following notice pursuant to that policy:

NOTICE: The user's attention is called to the possibility that compliance with an NFPA Standard may require use of an invention covered by patent rights. NFPA takes no position as to the validity of any such patent rights or as to whether such patent rights constitute or include essential patent claims under the ANSI Patent Policy. If, in connection with the ANSI Patent Policy, a patent holder has filed a statement of willingness to grant licenses under these rights on reasonable and nondiscriminatory terms and conditions to applicants desiring to obtain such a license, copies of such filed statements can be obtained, on request, from NFPA. For further information, contact the NFPA at the address listed below.

Law and Regulations

Users of NFPA Standards should consult applicable federal, state, and local laws and regulations. NFPA does not, by the publication of its codes, standards, recommended practices, and guides, intend to urge action that is not in compliance with applicable laws, and these documents may not be construed as doing so.

Copyrights

NFPA Standards are copyrighted. They are made available for a wide variety of both public and private uses. These include both use, by reference, in laws and regulations, and use in private self-regulation, standardization, and the promotion of safe practices and methods. By making these documents available for use and adoption by public authorities and private users, the NFPA does not waive any rights in copyright to these documents.

Use of NFPA Standards for regulatory purposes should be accomplished through adoption by reference. The term "adoption by reference" means the citing of title, edition, and publishing information only. Any deletions, additions, and changes desired by the adopting authority should be noted separately in the adopting instrument. In order to assist NFPA in following the uses made of its documents, adopting authorities are requested to notify the NFPA (Attention: Secretary, Standards Council) in writing of such use. For technical assistance and questions concerning adoption of NFPA Standards, contact NFPA at the address below.

For Further Information

All questions or other communications relating to NFPA Standards and all requests for information on NFPA procedures governing its codes and standards development process, including information on the procedures for requesting Formal Interpretations, for proposing Tentative Interim Amendments, and for proposing revisions to NFPA standards during regular revision cycles, should be sent to NFPA headquarters, addressed to the attention of the Secretary, Standards Council, NFPA, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101; email: stds_admin@nfpa.org.

For more information about NFPA, visit the NFPA website at www.nfpa.org. All NFPA codes and standards can be viewed at no cost at www.nfpa.org/docinfo.

This is a preview. Click here to purchase the full publication.

Copyright © 2017 National Fire Protection Association®. All Rights Reserved.

NFPA® 1999

Standard on

Protective Clothing and Ensembles for Emergency Medical Operations

2018 Edition

This edition of NFPA 1999, *Standard on Protective Clothing and Ensembles for Emergency Medical Operations*, was prepared by the Technical Committee on Emergency Medical Services Protective Clothing and Equipment and released by the Correlating Committee on Fire and Emergency Services Protective Clothing and Equipment. It was issued by the Standards Council on August 1, 2017, with an effective date of August 21, 2017, and supersedes all previous editions.

This document has been amended by one or more Tentative Interim Amendments (TIAs) and/or Errata. See "Codes & Standards" at www.nfpa.org for more information.

This edition of NFPA 1999 was approved as an American National Standard on August 21, 2017.

Origin and Development of NFPA 1999

This standard was developed to address protective garments, gloves, and facewear designed that protect persons providing emergency medical care against exposure to liquid-borne pathogens during emergency medical operations. NFPA 1999 defines minimum performance for protective clothing as required by the Occupational Safety and Health Administration (OSHA) Final Rule (29 CFR 1910.1030) *Protecting Health Care Workers from Occupational Exposure to Bloodborne Pathogens*. The Final Rule states:

"When there is occupational exposure, the employer shall provide at no cost to the employee, appropriate personal protective equipment, such as, but not limited to, gloves, gowns, laboratory coats, face shields or masks, and eye protection, and mouthpieces, resuscitation bags, pocket masks, or other ventilation devices. Personal protective equipment will be considered 'appropriate' only if it does not permit blood or other potential infectious materials to pass through to or reach the employee's work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used."

NFPA 1999 offers specific performance criteria that involve exposing protective clothing materials to surrogate virus challenge utilizing a specific time and pressure protocol. This procedure has been documented to discriminate between current protective clothing materials and to correlate with visual penetration results that are obtained with a human factors evaluation. Each type of clothing must resist penetration to blood-borne pathogens as determined by this test.

Additional garment requirements cover overall liquidtight integrity, material strength, physical hazard resistance, seam strength, and closure strength. Additional requirements for gloves cover minimum performance for tensile and elongation properties in an "as received" condition as well as following heat aging and isopropyl alcohol immersion, minimum sizing, and liquidtight integrity for intended areas of penetration.

Additional requirements for facewear or face protection devices cover adequate visibility and integrity, in addition to resisting penetration of blood-borne pathogens.

The selection of test methods and performance requirements was based on surveys of emergency medical services (EMS) personnel and a technical study supported by the U.S. Fire Administration. The Subcommittee on Hazardous Chemicals Protective Clothing began its work on the first edition of this document in 1990 and passed on its work to the Technical Committee on Fire Service Protective Clothing and Equipment in January 1991. The first edition was presented to the Association at the 1992 Annual Meeting in New Orleans, LA.

Since the first edition in 1992, the entire project for fire service protective clothing and equipment was reorganized in January 1995 by the Standards Council. The new project had a

NFPA and National Fire Protection Association are registered trademarks of the National Fire Protection Association, Quincy, Massachusetts 02169.

This is a preview. Click here to purchase the full publication.

Technical Correlating Committee on Fire and Emergency Services Protective Clothing and Equipment and eight technical committees operating within it. The Technical Committee on Emergency Medical Services Protective Clothing and Equipment was now responsible for NFPA 1999.

In 1997, the second edition incorporated single-use and reusable items of EMS protective clothing. Prior to that edition, there was no differentiation between single-use and reusable items. Items that were reused might not have continued to provide biopenetration barrier protection. Reusable items could be advantageous and cost-effective for certain items of EMS clothing such as garments. Durability conditioning was added to the test methods of items that would be identified as not for single use only. EMS gloves remained single-use items only. This was consistent with NFPA 1581, *Standard on Fire Department Infection Control Program*. EMS gloves were also newly required to be an FDA registered medical device.

The first edition allowed partial body garments, such as sleeve covers or apron-type gowns, and also allowed the biopenetration barrier protection to be less in area than the area covered by the garment (such as only the front of a smock or jacket having the biopenetration barrier protection). The second edition continued to permit partial body garments but did not allow partial biopenetration barrier protection in a garment. Biopenetration barrier protection was required for the full area covered by the garment.

Test methods were completely reformatted to present consistency in test methods and to assure that all key elements of a test were given within the method.

The third edition of NFPA 1999 was reformatted into the new style for all NFPA codes and standards and, therefore, the chapter titles and numbering, as well as paragraph numbering, changed. In that edition, the committee added new requirements for emergency medical work gloves, emergency medical footwear, and cleaning/utility gloves.

Emergency medical work gloves would provide the barrier protection from blood- and liquid-borne pathogens that all EMS PPE provides, and a higher level of physical protection for incidents where rough or sharp surfaces could be contacted, such as during extrication operations. The emergency medical footwear could be configured either as a single-use, disposable bootie to pull over work shoes or as normal footwear designed for multiple uses. Both would provide the same barrier protection from blood- and liquid-borne pathogens as other items of EMS PPE. The cleaning/utility gloves were single-use items to protect wearers during cleaning and decontamination of EMS equipment.

The third (2003) edition of NFPA 1999 was acted on by the NFPA membership at the November Association Technical Meeting in Atlanta, Georgia, on November 20, 2002, and became effective on February 6, 2003.

The 2008 (fourth) edition of NFPA 1999 included a number of changes that were implemented to address emerging needs for EMS providers as well as to address the special protection needs of first receivers at hospitals or other health care facilities. Specific attention was paid to types of emergency medical protective clothing items where certification activity and consequent use of certified products had been limited. Much of the work was supported by a research contract effort funded by the National Institute for Occupational Safety and Health (NIOSH) National Personal Protective Technology Laboratory (NPPTL). The NIOSH NPPTL research program involved a detailed investigation of emergency medical responder needs, identification of evaluation techniques to address these needs, testing of representative products, outreach to end-user groups to assist with discerning acceptable levels of protection, and the proposal of specific criteria. The results of this supporting work are available in the project final report, *Improved Criteria for Emergency Medical Protective Clothing, Contract No. 214-2006-M-15870 Final Report*.

The principal changes incorporated in the fourth edition of NFPA 1999 included the following:

(1) Differentiation between multiple- and single-use protective garments based on specific physical property criteria.
(2) Application of a flammability test for certain items of protective clothing to prevent the use of dangerous products in the event of accidental flame contact.
(3) New design, performance, testing, documentation, and certification requirements for [C]BRN protective ensembles to provide protection for emergency services responders and medical receivers against biological agents and radiological particulates. The use of the [C] in the "[C]BRN" format is to indicate that chemical protection is not offered by this ensemble, while retaining the widely used "CBRN" term. This level of protection would be needed for medical receivers and medical treatment personnel where CBRN incident victims self-present at a medical facility, or the victims have not been decontaminated or only partially decontaminated prior to transport to a medical facility. This [C]BRN protection is not addressed by the single-use garments covered in NFPA 1994, *Standard on Protective Ensembles for First Responders to CBRN Terrorism Incidents*. The new requirements focus on full ensembles that are subject to multiple uses prior to use during a CBRN incident.
(4) New criteria for head protection to establish protection requirements for impact hazards at emergency sites, and some guidance in the annex provided to also address prevention of trauma to emergency medical personnel traveling inside vehicles.
(5) New category of footwear to address the physical environments for first receivers at hospitals or other health care facilities.
(6) Revised criteria for footwear covers to address performance properties consistent with expected use, such as abrasion resistance of sole materials.

This is a preview. Click here to purchase the full publication.

(7) New classification and performance requirements for eye and face protection devices. The new system segregates the different types of eye/face protection into "single-use" and "reusable" devices, and a separate category of medical face masks that are frequently used by emergency services responders during emergency medical care.
(8) Revision of requirements for cleaning glove performance to eliminate conflicting criteria.
(9) New optional high-visibility markings criteria for emergency responder protective garments; these optional criteria are consistent with ANSI 107, *Standard on High-Visibility Safety Apparel*.

In addition to the principal changes, a number of clarifications and improvements were made to ensure consistency of requirements throughout the standard.

The fourth (2008) edition was issued by the NFPA Standards Council with an effective date of December 31, 2007.

The fifth (2013) edition of NFPA 1999 was a complete revision of the document that included editorial changes, updates to referenced publications, and new or revised definitions for *gusset*, *tongue*, *interface component*, and *manufacturer*.

The 2013 edition removed the puncture resistance test two and the impact and compression resistance test. Revisions to the abrasion test, slip resistance test, footwear upper materials testing, cut resistance test, washing and drying procedures, and chemical permeation resistance test were also included. This edition also featured a new section on work glove test areas.

The sixth (2018) edition of NFPA 1999 was a complete revision and mainly featured the incorporation of TIA 13-1 [related to the PPE requirements of first responders and medical first receivers against Ebola Viral Disease (EBD) and other highly infectious liquid-borne pathogens]. This edition features new provisions for performance requirements for PPE ensembles that offer full body protection and a liquid integrity evaluation to demonstrate an established protective level of performance.

Other changes include adding the word "ensembles" to the name of the standard. NFPA 1999 now also applies to single-use and multiple-use emergency protective ensembles and provides definitions for those terms. Changes were also made to the design requirements for garment footwear and respirator requirements. Changes were made to the liquidtight integrity test and the puncture resistance test. *Elastomer interface material* is now defined, and new performance requirements for those items was added. This one item alone resulted in a number of editorial changes for consistency throughout the standard.

This is a preview. Click here to purchase the full publication.

Correlating Committee on Fire and Emergency Services Protective Clothing and Equipment

William E. Haskell, III, *Chair*
National Institute for Occupational Safety & Health, MA [E]
Rep. National Institute for Occupational Safety & Health

Jason L. Allen, Intertek Testing Services, NY [RT]
James B. Area, Chimera Enterprises International, MD [SE]
Joseph Arrington, San Antonio Fire Department, TX [U]
Roger L. Barker, North Carolina State University, NC [SE]
James E. Brinkley, International Association of Fire Fighters, DC [L]
Rep. International Association of Fire Fighters
Steven D. Corrado, UL LLC, NC [RT]
Cristine Z. Fargo, International Safety Equipment Association, VA [M]
Edmund Farley, Pittsburgh Bureau Of Fire, PA [E]
Robert A. Freese, Globe Manufacturing Company, NH [M]
Patricia A. Gleason, ASTM/Safety Equipment Institute (SEI), VA [RT]
David V. Haston, U.S. Department of Agriculture, ID [E]
Diane B. Hess, PBI Performance Products, Inc., NC [M]
Thomas M. Hosea, U.S. Department of the Navy, FL [RT]
James S. Johnson, Lawrence Livermore National Laboratory, CA [RT]
Jeff Legendre, Northborough Fire Department, MA [U]
Karen E. Lehtonen, Lion Group, Inc., OH [M]
David G. Matthews, Fire & Industrial (P.P.E) Ltd., United Kingdom [SE]
Rep. International Standards Organization
Benjamin Mauti, Mine Safety Appliances Company, PA [M]
Rep. Compressed Gas Association
Michael F. McKenna, Michael McKenna & Associates, LLC, CA [SE]
John H. Morris, TYCO/Scott Safety, GA [M]
Jack E. Reall, Columbus (OH) Division of Fire, OH [L]
Rep. Columbus Firefighters Union
Jeffrey O. Stull, International Personnel Protection, Inc., TX [M]
Tim W. Tomlinson, Addison Fire Department, TX [C]
Robert D. Tutterow, Jr., Fire Industry Equipment Research Organization (FIERO), NC [U]
Rep. NFPA Fire Service Section
William A. Van Lent, Veridian Ltd., Inc., IA [M]
Rep. Fire & Emergency Manufacturers & Services Association
Bruce H. Varner, BHVarner & Associates, AZ [M]
Rep. International Fire Service Training Association
Steven H. Weinstein, Honeywell Safety Products, CA [M]
Richard Weise, Los Angeles County Fire Department, CA [U]
Harry P. Winer, HIP Consulting LLC, MA [SE]

Alternates

Louis Carpentier, Innotex Inc., Canada [M]
(Alt. to William A. Van Lent)
Patricia A. Freeman, Globe Manufacturing Company, LLC, NH [M]
(Alt. to Robert A. Freese)
Tim J. Gardner, 3M Company, MN [M]
(Alt. to Cristine Z. Fargo)
Pamela A. Kavalesky, Intertek Testing Services, NY [RT]
(Alt. to Jason L. Allen)
Judge W. Morgan, Tyco/Scott Safety, NC [M]
(Alt. to John H. Morris)
Gary L. Neilson, Sparks, NV [U]
(Alt. to Robert D. Tutterow, Jr.)
Amanda H. Newsom, UL LLC, NC [RT]
(Alt. to Steven D. Corrado)
Anthony Petrilli, U.S. Department of Agriculture, MT [E]
(Alt. to David V. Haston)
Stephen R. Sanders, ASTM/Safety Equipment Institute (SEI), VA [RT]
(Alt. to Patricia A. Gleason)
Russell Shephard, Australasian Fire & Emergency Service Authorities Council, Australia [SE]
(Alt. to David G. Matthews)
David P. Stoddard, Michael McKenna & Associates, LLC, CA [SE]
(Alt. to Michael F. McKenna)
Grace G. Stull, International Personnel Protection, Inc., TX [M]
(Alt. to Jeffrey O. Stull)
Jonathan V. Szalajda, National Institute for Occupational Safety & Health, PA [E]
(Alt. to William E. Haskell, III)
Donald B. Thompson, North Carolina State University, NC [SE]
(Alt. to Roger L. Barker)
W. Jason Traynor, MSA Safety, PA [M]
(Alt. to Benjamin Mauti)
Jian Xiang, The DuPont Company, Inc., VA [M]
(Alt. to Diane B. Hess)

Nonvoting

Robert J. Athanas, FDNY/SAFE-IR, Incorporated, NY [U]
Rep. TC on Electronic Safety Equipment
Christina M. Baxter, U.S. Department of Defense, VA [E]
Rep. TC on Hazardous Materials PC&E
Tricia L. Hock, ASTM/Safety Equipment Institute (SEI), VA [RT]
Rep. TC on Emergency Medical Services PC&E
Stephen J. King, Babylon, NY [SE]
Rep. TC on Structural and Proximity Fire Fighting PC&E
Jeremy Metz, West Metro Fire Rescue, CO [U]
Rep. TC on Special Operations PC&E
Brian Montgomery, U.S. Department of Justice, DC [E]
Daniel N. Rossos, Oregon Department of Public Safety Standards & Training, OR [E]
Rep. TC on Respiratory Protection Equipment
Rick L. Swan, IAFF Local 2881/CDF Fire Fighters, VA [L]
Rep. TC on Wildland Fire Fighting PC&E

This is a preview. Click here to purchase the full publication.

Chris Farrell, NFPA Staff Liaison

This list represents the membership at the time the Committee was balloted on the final text of this edition. Since that time, changes in the membership may have occurred. A key to classifications is found at the back of the document.

NOTE: Membership on a committee shall not in and of itself constitute an endorsement of the Association or any document developed by the committee on which the member serves.

Committee Scope: This Committee shall have primary responsibility for documents on the design, performance, testing, and certification of protective clothing and protective equipment manufactured for fire and emergency services organizations and personnel, to protect against exposures encountered during emergency incident operations. This Committee shall also have the primary responsibility for documents on the selection, care, and maintenance of such protective clothing and protective equipment by fire and emergency services organizations and personnel.

This is a preview. Click here to purchase the full publication.

Technical Committee on Emergency Medical Services Protective Clothing and Equipment

Tricia L. Hock, *Chair*
ASTM/Safety Equipment Institute (SEI), VA [RT]

Karen E. Lehtonen, *Secretary*
Lion Group, Inc., OH [M]

Jason L. Allen, Intertek Testing Services, NY [RT]
James B. Area, Chimera Enterprises International, MD [SE]
Sandy Bogucki, Yale University Emergency Medicine, CT [E]
Steven D. Corrado, UL LLC, NC [RT]
James E. Davis, Columbus Firefighters Local 67, OH [L]
Todd P. Davis, Town of Longmeadow Fire Department, MA [C]
Patricia A. Freeman, Globe Manufacturing Company, LLC, NH [M]
David R. Harris, U.S. Air Force, NJ [L]
William E. Haskell, III, National Institute for Occupational Safety & Health, MA [E]
Barry L. Hickerson, Marketpoint, LLC, CA [M]
Michael P. Kienzle, W. L. Gore & Associates, Inc., MD [M]
Beth C. Lancaster, U.S. Department of Defense, VA [E]
Philip C. Mann, Kappler, Inc., AL [M]
Richard W. Patrick, U.S. Department of Homeland Security, MD [E]
Jeff Sadtler, West County EMS and Fire Protection District, MO [L]
Rep. International Association of Fire Fighters

Alternates

William A. Fithian, ASTM/Safety Equipment Institute (SEI), VA [RT]
(Alt. to Tricia L. Hock)
Pamela A. Kavalesky, Intertek Testing Services, NY [RT]
(Alt. to Jason L. Allen)
Richard D. MacKinnon, Jr., Town of Whitman Fire Department, MA [L]
(Alt. to Jeff Sadtler)
Judith Casey Mulcay, Kappler, AL [M]
(Alt. to Philip C. Mann)
Amanda H. Newsom, UL LLC, NC [RT]
(Alt. to Steven D. Corrado)
Ashley M. Scott, Lion Group, Inc., OH [M]
(Alt. to Karen E. Lehtonen)

David G. Trebisacci, NFPA Staff Liaison

This list represents the membership at the time the Committee was balloted on the final text of this edition. Since that time, changes in the membership may have occurred. A key to classifications is found at the back of the document.

NOTE: Membership on a committee shall not in and of itself constitute an endorsement of the Association or any document developed by the committee on which the member serves.

Committee Scope: This Committee shall have primary responsibility for documents on protective clothing and protective equipment, except respiratory protective equipment, that provides hand, torso, limb, and face protection for fire fighters or other emergency services responders during incidents that involve emergency medical operations. These operations include first aid, cardiopulmonary resuscitation, basis life support, advanced life support, and other medical procedures provided to patients prior to arrival at a hospital or other health care facility.

Additionally, this committee shall have primary responsibility for documents on the selection, care, and maintenance of emergency medical protective clothing and protective equipment by fire and emergency services organizations and personnel.

This is a preview. Click here to purchase the full publication.

Contents

This is a preview. Click here to purchase the full publication.