NFPA 1521

Standard for

Fire Department Safety Officer

2002 Edition

Copyright © 2002, National Fire Protection Association, All Rights Reserved

This edition of NFPA 1521, *Standard for Fire Department Safety Officer*, was prepared by the Technical Committee on Fire Service Occupational Safety and acted on by NFPA at its May Association Technical Meeting held May 19–23, 2002, in Minneapolis, MN. It was issued by the Standards Council on July 19, 2002, with an effective date of August 8, 2002, and supersedes all previous editions.

This edition of NFPA 1521 was approved as an American National Standard on July 19, 2002.

Origin and Development of NFPA 1521

The first edition of the *Standard for Fire Department Safety Officer* was adopted by the National Fire Protection Association at the Annual Meeting in Washington, DC, on May 16–19, 1977. A complete revision was completed by the Technical Committee on Fire Service Occupational Safety and Health in 1986 and became the second edition in June 1987. The first two editions were identified as NFPA 1501.

In 1992, a complete revision was made, and the identifying number of the standard was changed from NFPA 1501 to NFPA 1521 to fit in the numbering plan for fire service occupational safety and health documents.

In 1997, in the fourth revision to NFPA 1521, the committee focused on adding text to differentiate between the roles of incident safety officer (ISO) and health and safety officer (HSO). Since the 1992 edition, numerous questions had arisen concerning the roles and responsibilities, qualifications, and training for each of these positions. The National Fire Academy, with assistance from NFPA staff and technical committee members, developed two courses for the fire service that outlined the differences in these two positions within a fire department. These courses provided an excellent opportunity for the fire service to train personnel who were designated for these critical positions. Consequently, these courses referenced the applicable requirements within this standard. This edition also included sample forms to assist the user with fire station inspections. Additionally, this document showed

how each of these positions fits into a fire department's risk management plan.

This fifth edition of NFPA 1521 is a reconfirmation. The technical committee members have extracted sections of this document and inserted them in both NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*, and NFPA 1561, *Standard on Emergency Services Incident Management System*. For now, this document and the companion series for fire service occupational safety and medical and health documents continue to provide a platform from which fire departments can enhance and improve fire fighter safety.

Technical Committee on Fire Service Occupational Safety

John A. Sharry, *Chair* Lawrence Livermore National Laboratory, CA [E]

Donald Aldridge, Lion Apparel, Inc., OH [M]

Glenn P. Benarick, Fairfax County Fire Department, VA [U] Rep. NFPA Fire Service Section

Mary S. Bogucki, Yale University, CT [SE]

Angelo M. Catalano, New York State Association of Fire Districts, NY [U]

Dennis R. Childress, Orange County Fire Authority, CA [U]

Bradd K. Clark, Sand Springs Fire Department, OK [U] Rep. International Fire Service Training Association

Dominic J. Colletti, Hale Products, Inc., PA [M] Rep. Fire Apparatus Manufacturers Association

Scott L. Davidson, Volunteer Firemen's Insurance Services, Inc. (VFIS), PA [I]

Phil J. Eckhardt, Mine Safety Appliances Company, PA [M] Rep. Industrial Safety Equipment Association

K. R. Ethridge, Texas Commission on Fire Protection, TX [E]

Don R. Forrest, United Firefighters of Los Angeles City, CA [L] Rep. International Association of Fire Fighters

James C. Goodbread, U.S. Air Force, OK [U]

Curt T. Grieve, Sacramento, CA [SE]

Tom A. Hillenbrand, Underwriters Laboratories Inc., IL [RT]

Jonathan D. Kipp, Primex3, NH [I]

Buck Latapie, USDA Forest Service, DC [E]

John LeCuyer, Aurora Fire Department, CO [L]

George L. Maier, III, New York City Fire Department, NY [U]

Richard A. Marinucci, Farmington Hills Fire Department, MI [E] Rep. International Association of Fire Chiefs

Roger A. McGary, Montgomery County Division of Fire & Rescue Services, MD [U] Rep. International Society of Fire Service Instructors

Robert D. Neamy, Los Angeles City Fire Department, CA [U]

William E. Perrin, Montana Fire Training School, MT [SE] Rep. National Association of State Directors of Fire Training & Education

Neil Rossman, Rossman & Eschelbacher, MA [SE]

Philip C. Stittleburg, LaFarge Fire Department, WI [U] Rep. National Volunteer Fire Council

Grace Yamane, San Diego Fire and Life Safety Services, CA [L] Rep. Women in the Fire Service

Alternates

Patricia L. Doler, Santa Clara County Fire Protection District, CA [L] (Alt. to G. Yamane)

Craig A. Fry, Los Angeles City Fire Department, CA [U] (Alt. to R. D. Neamy)

Terry G. Glunt, U.S. Fire Administration, MD [SE] (Vot. Alt. to USFA Rep.)

Jim Johannessen, Underwriters Laboratories Inc., PA [RT] (Alt. to T. A. Hillenbrand)

Scott D. Kerwood, Orange County Emergency Services District #1, TX [E] (Alt. to R. A. Marinucci)

Murrey E. Loflin, Virginia Beach Fire Department, VA [U] (Alt. to G. P. Benarick)

David A. Love, Jr., Volunteer Firemen's Insurance Services, Inc. (VFIS), PA [I] (Alt. to S. L. Davidson)

Daniel J. Martinelli, Aurora Fire Department, CO [L]

(Alt. to J. LeCuyer)

Ron C. Miller, Fairbank, IA [U]

(Alt. to P. C. Stittleburg)

Gary L. Neilson, Reno Fire Department, NV [E]

(Vot. Alt. to FDSOA Rep.)

William E. Newcomb, TFG/North Safety Products, RI [M]

(Alt. to P. J. Eckhart)

Stephen E. Norris, United Firefighters of Los Angeles City, CA [L]

(Alt. to D. R. Forrest)

Richard S. Pike, Wantagh Fire District, NY [U]

(Alt. to A. M. Catalano)

Andrew E. Pompe, Lion Apparel, Inc., PA [M]

(Alt. to D. Aldridge)

Joseph F. Williams, Weldon Technologies, Inc., OH [M]

(Alt. to D. J. Colletti)

Stephen N. Foley, NFPA Staff Liaison

Committee Scope: This Committee shall have primary responsibility for documents on occupational safety in the working environment of the fire service; and safety in the proper use of fire department vehicles, tools, equipment, protective clothing, and protective breathing apparatus.

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.

NFPA 1521 Standard for Fire Department Safety Officer 2002 Edition

NOTICE: An asterisk (*) following the number or letter designating a paragraph indicates that explanatory material on the paragraph can be found in Annex A.

Information on referenced publications can be found in Chapter 2 and Annex B.

Chapter 1 Administration

1.1 Scope.

- **1.1.1** This standard contains minimum requirements for the assignment, duties, and responsibilities of a health and safety officer and an incident safety officer for a fire department or other fire service organization.
- **1.1.2** These requirements shall be applicable to organizations providing rescue, fire suppression, emergency medical services, hazardous materials mitigation, special operations, and other emergency services, including public, military, private, and industrial fire departments.
- **1.1.3** This standard does not apply to industrial fire brigades that also can be known as emergency brigades, emergency response teams, fire teams, plant emergency organizations, or mine emergency response teams.

1.2 Purpose.

- **1.2.1** The purpose of this standard shall be to specify the minimum requirements for a fire department health and safety officer and an incident safety officer.
- **1.2.2** This standard shall be intended to meet the requirements of Chapters 4 and 8 of NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*.
- **1.2.3** Many of the performance objectives of this standard shall be permitted to be achieved in a variety of ways. Nothing herein shall be intended to restrict any jurisdiction from exceeding these minimum requirements.

1.3 Equivalency.

- **1.3.1** The authority having jurisdiction shall be permitted to approve an equivalent level of qualifications for the requirements specified in 4.2.1 of this standard provided that the fire department has technical documentation to demonstrate equivalency.
- **1.3.2** The approved equivalent levels shall secure as nearly equivalent training, education, competency, and safety as possible and shall require that training, education, and competency be commensurate with those functions that the members are expected to perform. In no case shall the equivalency afford less competency of members or safety to members than that which, in the judgment of the authority having jurisdiction, would be provided by compliance with the provisions of the specified paragraph.

Chapter 2 Referenced Publications

2.1 General.

The documents or portions thereof listed in this chapter are referenced within this standard and shall be considered part of the requirements of this document.

2.2 NFPA Publications.

National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.

NFPA 472, Standard for Professional Competence of Responders to Hazardous Materials Incidents, 2002 edition.

NFPA 1002, Standard for Fire Department Apparatus Driver/Operator Professional Qualifications, 1998 edition.

NFPA 1021, Standard for Fire Officer Professional Qualifications, 1997 edition.

NFPA 1403, Standard on Live Fire Training Evolutions, 2002 edition.

NFPA 1500, Standard on Fire Department Occupational Safety and Health Program, 2002 edition

NFPA 1561, Standard on Emergency Services Incident Management System, 2002 edition.

NFPA 1581, Standard on Fire Department Infection Control Program, 2000 edition.

2.3 Other Publications.

2.3.1 U.S. Government Publication.

U.S. Government Printing Office, Washington, DC 20402.

29 Code of Federal Regulations 1910.1030, Occupational Exposure to Bloodborne Pathogens, December 6, 1991.

Chapter 3 Definitions

3.1 General.

The definitions contained in this chapter shall apply to the terms used in this standard. Where terms are not included, common usage of the terms shall apply.

3.2 NFPA Official Definitions.

- **3.2.1* Approved.** Acceptable to the authority having jurisdiction.
- **3.2.2* Authority Having Jurisdiction (AHJ).** The organization, office, or individual responsible for approving equipment, materials, an installation, or a procedure.
- **3.2.3 Shall.** Indicates a mandatory requirement.
- **3.2.4 Should.** Indicates a recommendation or that which is advised but not required.

3.3 General Definitions.

- **3.3.1 Accident.** Any unexpected event that interrupts or interferes with the orderly progress of fire department operations and can include personal injury or property damage.
- **3.3.2 Assistant Safety Officer.** A member of the fire department assigned and authorized by the fire chief to assist the fire department health and safety officer or incident safety officer in the performance of the duties and responsibilities specified in this standard.
- **3.3.3 Driver/Operator.** A person having satisfactorily completed the requirements of driver/operator as specified in NFPA 1002, *Standard for Fire Apparatus Driver/Operator Professional Qualifications*.
- **3.3.4 Emergency Incident.** A specific emergency operation.
- **3.3.5 Emergency Medical Care.** The provision of treatment to patients, including first aid, cardiopulmonary resuscitation, basic life support, advanced life support, and other medical procedures that occur prior to arrival at a hospital or other health care facility.
- **3.3.6 Emergency Operations.** Activities of the fire department relating to rescue, fire suppression, emergency medical care, and special operations, including response to the scene of the incident and all functions performed at the scene.
- **3.3.7 Fire Apparatus.** A fire department emergency vehicle used for rescue, fire suppression, or other specialized functions.
- **3.3.8** Fire Chief. The highest ranking officer in charge of a fire department.
- **3.3.9 Fire Department.** An organization providing rescue, fire suppression, and related activities. The term *fire department* shall include any public, governmental, private, industrial, or military organization engaging in this type of activity.
- **3.3.10 Fire Department Facility.** Any building or area owned, operated, occupied, or used by a fire department on a routine basis. This does not include locations where a fire department might be summoned to perform emergency operations or other duties, unless such premises are normally under the control of the fire department.
- 3.3.11 Fire Department Member. See Member.
- **3.3.12 Fire Department Safety Officer.** Functions comprised of the health and safety officer and the incident safety officer. These roles can be performed by one member or several members as designated by the fire chief. (See Health and Safety Officer and Incident Safety Officer.)
- **3.3.13 Fire Department Vehicles.** Any vehicle operated by a fire department, including fire apparatus.
- **3.3.14 Fire Suppression.** The activities involved in controlling and extinguishing fires. Fire suppression shall include all activities performed at the scene of a fire incident or training exercise that expose fire department members to the dangers of heat, flame, smoke, or other products of combustion, explosion, or structural collapse.
- **3.3.15 Hazard.** The potential for harm or damage to people, property, or the environment. Hazards include the characteristics of facilities, equipment systems, property, hardware, or

other objects, and the actions and inactions of people that create such hazards.

- **3.3.16 Health and Safety Officer.** The member of the fire department assigned and authorized by the fire chief as the manager of the safety and health program and who performs the duties and responsibilities specified in this standard. This individual can be the incident safety officer or it can also be a separate function.
- **3.3.17 Health Hazard.** Any property of a material that either directly or indirectly can cause injury or incapacitation, either temporary or permanent, from exposure by contact, inhalation, or ingestion.
- **3.3.18 Imminent Hazard.** An act or condition that is judged to present a danger to persons or property that is so urgent and severe that it requires immediate corrective or preventive action.
- **3.3.19 Incident Action Plan.** The objectives reflecting the overall incident strategy, tactics, risk management, and member safety that are developed by the incident commander. Incident action plans are updated throughout the incident.
- **3.3.20 Incident Commander.** The fire department member in overall command of an emergency incident.
- **3.3.21 Incident Management System (IMS).** An organized system of roles, responsibilities, and standard operating procedures used to manage and direct emergency operations. Such systems are often referred to as incident command systems (ICS).
- **3.3.22 Incident Safety Officer.** An individual appointed to respond to or assigned at an incident scene by the incident commander to perform the duties and responsibilities specified in this standard. This individual can be the health and safety officer or it can be a separate function.
- **3.3.23 Incident Safety Plan.** The strategies and tactics developed by the incident safety officer based upon the incident commander's incident action plan and the type of incident encountered.
- **3.3.24 Incident Scene.** The location where activities related to a specific incident are conducted. This shall include the entire area subject to incident-related hazards and all areas used by fire department members and equipment in proximity to the incident.
- **3.3.25 Incident Scene Rehabilitation.** The tactical level management unit that provides for medical evaluation, treatment, monitoring, fluid and food replenishment, mental rest, and relief from climatic conditions of the incident.
- **3.3.26* Industrial Fire Department.** An organization providing rescue, fire suppression, and related activities. It can also provide emergency medical services, hazardous material operations, or other activities. These activities can occur at a single facility or facilities under the same management, whether for profit, not for profit, or government owned or operated, including occupancies such as industrial, commercial, mercantile, warehouse, and institutional. The industrial fire department is generally trained and equipped for specialized operation based on site-specific hazards present at the facilities. Groups or teams organized to perform specialized rescue services, but who do not perform fire suppression activities,

are not considered as industrial fire departments.

- **3.3.27 Member.** A person involved in performing the duties and responsibilities of a fire department under the auspices of the organization. A fire department member can be a full-time or part-time employee or a paid or unpaid volunteer, can occupy any position or rank within the fire department, and can engage in emergency operations.
- **3.3.28 Occupational Illness.** An illness or disease contracted through or aggravated by the performance of the duties, responsibilities, and functions of a fire department member.
- **3.3.29 Occupational Injury.** An injury sustained during the performance of the duties, responsibilities, and functions of a fire department member.
- **3.3.30 Occupational Safety and Health Program.** The overall program to provide occupational safety and health in a fire department as defined in NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*.
- **3.3.31 Procedure.** An organizational directive issued by the authority having jurisdiction or department that establishes a specific policy that must be followed.
- **3.3.32 Rescue.** Those activities directed at locating endangered persons at an emergency incident, removing those persons from danger, treating the injured, and providing for transport to an appropriate health care facility.
- **3.3.33 Risk Management.** Identification and analysis of exposure to hazards, selection of appropriate risk management techniques to handle exposures, implementation of chosen techniques, and monitoring of results, as respects the health and safety of members.
- **3.3.34 Safety Specialist.** An individual who has the expertise, knowledge, and professional experience to achieve control or reduction of occupational hazards and exposures. Assigned to assist the health and safety officer as part of the safety staff.
- **3.3.35 Safety Unit.** A member or members assigned to assist the incident safety officer. The tactical level management unit that can be comprised of the incident safety officer alone or with additional assistant safety officers assigned to assist in providing the level of safety supervision appropriate for the magnitude of the incident and the associated hazards.
- **3.3.36 Service Testing.** The regular, periodic inspection and testing of apparatus and equipment, according to an established schedule and procedure, to ensure that it is in safe and functional operating condition.
- **3.3.37 Special Operations.** Those emergency incidents to which the fire department responds that require specific and advanced training and specialized tools and equipment. Special operations include water rescue, extrication, hazardous materials, confined space entry, high-angle rescue, aircraft rescue and fire fighting, and other operations requiring specialized training.
- **3.3.38* Standard Operating Procedure.** A written organizational directive that establishes or prescribes specific operational or administrative methods to be followed routinely for the performance of designated operations or actions.
- **3.3.39 Tactical Level Management Unit.** A management unit identified in an incident Copyright NFPA

Chapter 4 Organization

4.1 Assignment.

- **4.1.1*** The fire chief shall have the ultimate responsibility for the fire department occupational safety and health program as specified in NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program.* A health and safety officer shall be assigned to manage the fire department occupational safety and health program.
- **4.1.2** The health and safety officer shall report directly to the fire chief's designated representative.
- **4.1.3*** Each fire department shall have a designated health and safety officer. The health and safety officer shall be permitted to be assigned as a full-time or part-time position, depending on the size and character of the fire department.
- **4.1.3.1** Additional assistant health and safety officers shall be appointed when the activities, size, or character of the fire department warrants extra safety personnel. If the health and safety officer is not available, additional assistant health and safety officers shall be appointed to ensure proper coverage.
- **4.1.3.2*** In the absence of the health and safety officer and assistant health and safety officer(s), alternate personnel shall be assigned to perform the duties and responsibilities of the position that requires immediate attention.
- **4.1.4** The incident commander shall have ultimate responsibility for incident scene safety as specified in NFPA 1561, *Standard on Emergency Services Incident Management System*.
- **4.1.4.1*** An incident safety officer shall be appointed when activities, size, or need occurs. The incident safety officer function shall be permitted to be a pre-designated position or appointed by the incident commander as needed. If the pre-designated incident safety officer is not available, the incident commander shall appoint an incident safety officer.
- **4.1.4.2** Additional assistant incident safety officer(s) shall be appointed when the activities, size, or need warrants extra safety personnel.

4.2 Qualifications of the Health and Safety Officer (HSO).

- **4.2.1** The health and safety officer shall be a fire department officer and shall meet the requirements for Fire Officer Level 1 specified in NFPA 1021, *Standard for Fire Officer Professional Qualifications*.
- **4.2.2*** The health and safety officer shall have and maintain a knowledge of current applicable laws, codes, and standards regulating occupational safety and health to the fire service.
- **4.2.3*** The health and safety officer shall have and maintain a knowledge of occupational safety and health hazards involved in emergency operations.

- **4.2.4*** The health and safety officer shall have and maintain a knowledge of the current principles and techniques of safety management.
- **4.2.5*** The health and safety officer shall have and maintain a knowledge of current health maintenance and physical fitness issues that affect the fire service members.
- **4.2.6*** The health and safety officer shall have and maintain a knowledge of infection control practice and procedures as required in NFPA 1581, *Standard on Fire Department Infection Control Program*.

4.3 Authority of the Health and Safety Officer (HSO).

- **4.3.1** The health and safety officer shall have the responsibility to identify and cause correction of safety and health hazards.
- **4.3.2** The health and safety officer shall have the authority to cause immediate correction of situations that create an imminent hazard to members.
- **4.3.3** Where nonimminent hazards are identified, a health and safety officer shall develop actions to correct the situation within the administrative process of the fire department. The fire department health and safety officer shall have the authority to bring notice of such hazards to whomever has the ability to cause correction.

4.4 Qualifications of the Incident Safety Officer (ISO).

- **4.4.1** The incident safety officer shall be a fire department officer and shall meet the requirements for Fire Officer Level 1 specified in NFPA 1021, *Standard for Fire Officer Professional Qualifications*.
- **4.4.2*** The incident safety officer shall have the knowledge, skill, and abilities to manage incident scene safety as defined in Chapter 6 of this standard.
- **4.4.3*** The incident safety officer shall have and maintain a knowledge of safety and health hazards involved in emergency operations.
- **4.4.4*** The incident safety officer shall have and maintain a knowledge of building construction.
- **4.4.5** The incident safety officer shall have and maintain a knowledge of the fire department's personnel accountability system.
- **4.4.6*** The incident safety officer shall have and maintain a knowledge of incident scene rehabilitation.

4.5 Authority of the Incident Safety Officer (ISO).

4.5.1 At an emergency incident where activities are judged by the incident safety officer to be unsafe or to involve an imminent hazard, the incident safety officer shall have the authority to alter, suspend, or terminate those activities. The incident safety officer shall immediately inform the incident commander of any actions taken to correct imminent hazards at the emergency scene.

- **4.5.2** At an emergency incident where an incident safety officer identifies unsafe conditions, operations, or hazards that do not present an imminent danger, the incident safety officer shall take appropriate action through the incident commander to mitigate or eliminate the unsafe condition, operation, or hazard at the incident scene.
- **4.5.3** At an emergency incident, assistant incident safety officer(s) shall be granted the authority as authorized in 4.5.1.

Chapter 5 Functions of the Health and Safety Officer

5.1 Risk Management.

- **5.1.1*** The health and safety officer shall be involved in the development, implementation, and management of the official written risk management plan as specified in Chapter 4 of NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*.
- **5.1.1.1** The health and safety officer shall communicate the health and safety aspects of the risk management plan to all members through training and education.
- **5.1.1.2** The health and safety officer shall make available the written risk management plan to all fire department members.
- **5.1.2** The health and safety officer shall monitor the effectiveness of the risk management plan and shall ensure the risk management plan is revised annually as it relates to fire fighter health and safety.
- **5.1.3** The health and safety officer shall develop an incident risk management plan that is implemented into the fire department's incident management system. This risk management plan shall meet the requirements of Chapter 8 of NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*.

5.2 Laws, Codes, and Standards.

- **5.2.1*** The health and safety officer shall develop, review, and revise rules, regulations, and standard operating procedures pertaining to the fire department occupational safety and health program. Based upon the directives and requirements of applicable laws, codes, and standards, the health and safety officer shall develop procedures that ensure compliance with these laws, codes, and standards. These recommended or revised rules, regulations, or standard operating procedures shall be submitted to the fire chief or the fire chief's designated representative by the health and safety officer.
- **5.2.2** The health and safety officer shall periodically report to the fire chief's designated representative on the adequacy of, effectiveness of, and compliance with the rules, regulations, and standard operating procedures specified in 5.2.1.
- **5.2.3** The fire chief shall define the role of the health and safety officer in the enforcement of the rules, regulations, and standard operating procedures.

5.3 Training and Education.

- **5.3.1*** The health and safety officer shall ensure that training in safety procedures relating to all fire department operations and functions is provided to fire department members. Training shall address recommendations arising from the investigation of accidents, injuries, occupational deaths, illnesses, and exposures and the observation of incident scene activities.
- **5.3.2** The health and safety officer shall cause safety supervision to be provided for training activities, including all live burn exercises. All structural live burn exercises shall be conducted in accordance with NFPA 1403, *Standard on Live Fire Training Evolutions*. The health and safety officer or qualified designee shall be personally involved in preburn inspections of any acquired structures to be utilized for live fire training.
- **5.3.3** The health and safety officer shall develop and distribute safety and health information for the education of fire department members.

5.4 Accident Prevention.

- **5.4.1** The health and safety officer shall manage an accident prevention program that addresses the items specified in this section. The health and safety officer shall be permitted to delegate the development, direct participation, review, or supervision of this program.
- **5.4.2** The accident prevention program shall provide instruction in safe work practices for all fire department members. This shall include safe work practices for emergency and nonemergency operations.
- **5.4.3** The accident prevention program shall address the training and testing of all fire department drivers, including all fire apparatus driver/operators.
- **5.4.4** The health and safety officer shall periodically survey operations, procedures, equipment, and fire department facilities with regard to maintaining safe working practices and procedures. The health and safety officer shall report any recommendations to the fire chief or the fire chief's designated representative.

5.5 Accident Investigation, Procedures, and Review.

- **5.5.1** The health and safety officer shall develop and implement procedures to ensure that a member(s) suffering a life-threatening occupational injury or illness is provided immediate emergency medical care and transportation to medical facilities. These procedures shall also ensure that all occupational injuries and illnesses are treated at the most appropriate health care facilities.
- **5.5.2** The health and safety officer shall investigate, or cause to be investigated, all occupational injuries, illnesses, exposures, and fatalities, or other potentially hazardous conditions involving fire department members and all accidents involving fire department vehicles, fire apparatus, equipment, or fire department facilities.
- **5.5.3** The health and safety officer shall develop corrective recommendations that result from accident investigations. The health and safety officer shall submit such corrective recommendations to the fire chief or the fire chief's designated representative.
- 5.5.4 The health and safety officer shall develop accident and injury reporting and

investigation procedures and shall periodically review these procedures for revision. These accident and injury reporting procedures shall comply with all local, state, and federal requirements.

5.5.5 The health and safety officer shall review the procedures employed during any unusually hazardous operation. Wherever it is determined that incorrect or questionable procedures were employed, the health and safety officer shall submit corrective recommendations to the fire chief or the fire chief's designated representative.

5.6 Records Management and Data Analysis.

- **5.6.1*** The fire department shall maintain records of all accidents, occupational deaths, injuries, illnesses, and exposures in accordance with Chapter 4 of NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*. The health and safety officer shall manage the collection and analysis of this information.
- **5.6.2** The health and safety officer shall identify and analyze safety and health hazards and shall develop corrective actions to deal with these hazards.
- **5.6.3** The health and safety officer shall ensure that records on the following are maintained as specified in Chapter 4 of NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program:*
- (1) Fire department safety and health standard operating procedures
- (2) Periodic inspection and service testing of apparatus and equipment
- (3) Periodic inspection and service testing of personal safety equipment
- (4) Periodic inspection of fire department facilities
- **5.6.4** The health and safety officer shall maintain records of all recommendations made and actions taken to implement or correct safety and health hazards or unsafe practices.
- **5.6.5** The health and safety officer shall maintain records of all measures taken to implement safety and health procedures and accident prevention methods.
- **5.6.6** The health and safety officer shall issue a report to the fire chief, at least annually, on fire department accidents, occupational injuries, illnesses, deaths, and exposures.

5.7 Apparatus and Equipment.

- **5.7.1** The health and safety officer shall review specifications for new apparatus, equipment, protective clothing, and protective equipment for compliance with the applicable safety standards in Chapters 6 and 7 of NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*.
- **5.7.2** The health and safety officer shall assist and make recommendations regarding the evaluation of new equipment and its acceptance or approval by the fire department in accordance with the applicable provisions of NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*.
- **5.7.3** The health and safety officer shall assist and make recommendations regarding the Copyright NFPA

service testing of apparatus and equipment to determine its suitability for continued service and in accordance with Chapter 6 of NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*.

5.7.4 The health and safety officer shall develop, implement, and maintain a protective clothing and protective equipment program that will meet the requirements in Chapter 7 of NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*, and provide for the periodic inspection and evaluation of all protective clothing and equipment to determine its suitability for continued service.

5.8 Facility Inspection.

- **5.8.1** The health and safety officer shall ensure all fire department facilities are inspected in accordance with Chapter 9 of NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*.
- **5.8.2** The health and safety officer shall ensure that any safety or health hazards or code violations are corrected in a prompt and timely manner.

5.9 Health Maintenance.

- **5.9.1** The health and safety officer shall ensure that the fire department complies with the requirements of Chapter 10 of NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program.*
- **5.9.2** The health and safety officer shall incorporate medical surveillance, wellness programs, physical fitness, nutrition, and injury and illness rehabilitation into the health maintenance program.

5.10 Liaison.

- **5.10.1** The health and safety officer shall be a member of the fire department occupational safety and health committee.
- **5.10.2** The health and safety officer shall report the recommendations of the fire department occupational safety and health committee to the fire chief or the fire chief's designated representative.
- **5.10.3** The health and safety officer shall submit recommendations on occupational safety and health to the fire chief or the fire chief's designated representative.
- **5.10.4** The health and safety officer shall provide information and assistance to officers and fire fighters for surveying their districts, so they will be able to identify and report safety and health hazards that could have adverse effects on fire department operations.
- **5.10.5** The health and safety officer shall maintain a liaison with staff officers regarding recommended changes in equipment, procedures, and recommended methods to eliminate unsafe practices and reduce existing hazardous conditions.
- **5.10.6** The health and safety officer shall maintain a liaison with equipment manufacturers, standards-making organizations, regulatory agencies, and safety specialists outside the fire

department regarding changes to equipment and procedures and methods to eliminate unsafe practices and reduce existing hazardous conditions.

5.10.7 The health and safety officer shall maintain a liaison with the fire department physician to ensure that needed medical advice and treatment are available to the members of the fire department.

5.11 Occupational Safety and Health Committee.

- **5.11.1** The health and safety officer shall ensure that an occupational safety and health committee is established by the fire department.
- **5.11.2** The health and safety officer shall ensure that the occupational safety and health committee meets the requirements of Chapter 4 of NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*, and Section 5.9 of this standard.

5.12 Infection Control.

- **5.12.1** The health and safety officer shall ensure that the fire department's infection control program meets the requirements of 29 CFR 1910.1030, *Occupational Exposure to Bloodborne Pathogens*, and NFPA 1581, *Standard on Fire Department Infection Control Program*.
- **5.12.2** The health and safety officer shall maintain a liaison with the person or persons designated as infection control officer to assist in achieving the objectives of the infection control program as specified in NFPA 1581, *Standard on Fire Department Infection Control Program*.
- **5.12.3** The health and safety officer shall function as the fire department infection control officer if an infection control officer position does not exist in the fire department.

5.13 Critical Incident Stress Management.

- **5.13.1** The health and safety officer shall ensure that the fire department establishes a critical incident stress management (CISM) program. The critical incident stress management program shall meet the requirements of Chapter 12 of NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*.
- **5.13.2** The health and safety officer shall ensure that the critical incident stress management program is incorporated into the fire department's member assistance program.

5.14 Postincident Analysis.

- **5.14.1** The health and safety officer shall develop procedures to ensure that safety and health issues are addressed during postincident analysis.
- **5.14.2** The health and safety officer shall provide a written report that includes pertinent information about the incident relating to safety and health issues.
- **5.14.3** The health and safety officer shall include information based upon input from the incident safety officer. This information shall include the incident action plan and the incident

safety officer's incident safety plan.

5.14.4 The health and safety officer shall include information about issues relating to the use of protective clothing and equipment, personnel accountability system, rehabilitation operations, and other issues affecting the safety and welfare of personnel at the incident scene.

Chapter 6 Functions of the Incident Safety Officer

6.1 Incident Management System.

- **6.1.1*** The incident safety officer shall be integrated with the incident management system as a command staff member, as specified in NFPA 1561, *Standard on Emergency Services Incident Management System*.
- **6.1.2*** Standard operating procedures shall define criteria for the response or appointment of an incident safety officer.
- **6.1.2.1** If the incident safety officer is designated by the incident commander, the fire department shall establish criteria for appointment based upon 6.1.1.
- **6.1.3*** The incident safety officer and assistant incident safety officer(s) shall be readily identifiable on the incident scene.

6.2 Incident Scene Safety.

- **6.2.1** The incident safety officer shall monitor conditions, activities, and operations to determine whether they fall within the criteria as defined in the fire department's risk management plan. When the perceived risk(s) is not within these criteria, the incident safety officer shall take action as outlined in Section 4.5.
- **6.2.2** The incident safety officer shall ensure that the incident commander establishes an incident scene rehabilitation tactical level management unit during emergency operations.
- **6.2.3** The incident safety officer shall monitor the scene and report the status of conditions, hazards, and risks to the incident commander.
- **6.2.4** The incident safety officer shall ensure that the fire department's personnel accountability system is being utilized.
- **6.2.5** The incident commander shall provide the incident safety officer with the incident action plan. The incident safety officer shall provide the incident commander with a risk assessment of incident scene operations.
- **6.2.6** The incident safety officer shall ensure that established safety zones, collapse zones, hot zone, and other designated hazard areas are communicated to all members present on scene.
- **6.2.7** The incident safety officer shall evaluate motor vehicle scene traffic hazards and apparatus placement and take appropriate actions to mitigate hazards.

- **6.2.8** The incident safety officer shall monitor radio transmissions and stay alert to transmission barriers that could result in missed, unclear, or incomplete communication.
- **6.2.9*** The incident safety officer shall communicate to the incident commander the need for assistant incident safety officers due to the need, size, complexity, or duration of the incident.
- **6.2.10** The incident safety officer shall survey and evaluate the hazards associated with the designation of a landing zone and interface with helicopters.

6.3 Fire Suppression.

- **6.3.1** The incident safety officer shall meet the provisions of Section 6.2 during fire suppression operations.
- **6.3.2** The incident safety officer shall ensure that a rapid intervention crew meeting the criteria in Chapter 8 of NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*, is available and ready for deployment.
- **6.3.3** Where fire has involved a building or buildings, the incident safety officer shall advise the incident commander of hazards, collapse potential, and any fire extension in such building(s).
- **6.3.4** The incident safety officer shall evaluate visible smoke and fire conditions and advise the incident commander, tactical level management units officers, and company officers on the potential for flashover, backdraft, blow-up, or other fire event that could pose a threat to operating teams.
- **6.3.5** The incident safety officer shall monitor the accessibility of entry and egress of structures and the effect it has on the safety of members conducting interior operations.

6.4 Emergency Medical Service Operations.

- **6.4.1** The incident safety officer shall meet the provisions of Section 6.2 during EMS operations.
- **6.4.2** The incident safety officer shall ensure compliance with the department's infection control plan and NFPA 1581, *Standard on Fire Department Infection Control Program*, during EMS operations.
- **6.4.3** The incident safety officer shall ensure that incident scene rehabilitation and critical incident stress management are established as needed at EMS operations, especially mass casualty incidents (MCI).

6.5 Hazardous Materials Operations.

- **6.5.1*** The incident safety officer shall meet the provisions of Section 6.2 during hazardous materials incidents.
- **6.5.2*** The hazardous materials incident safety officer shall meet the requirements of NFPA 472, Standard for Professional Competence of Responders to Hazardous Materials Incidents.

- **6.5.3** The incident safety officer shall attend strategic and tactical planning sessions and provide input on risk assessment and member safety.
- **6.5.4** The incident safety officer shall ensure that a safety briefing, including an incident action plan and an incident safety plan, is developed and made available to all members on the scene.
- **6.5.5** The incident safety officer shall ensure that hot, warm, decontamination, and other zone designations are clearly marked and communicated to all members.
- **6.5.6** The incident safety officer shall meet with the incident commander to determine rehabilitation, accountability, or rapid intervention needs. For long-term operations, the incident safety officer shall ensure that food, hygiene facilities, and any other special needs are provided for members.

6.6 Special Operations.

- **6.6.1*** The incident safety officer shall meet the provisions of Section 6.2 during special operations incidents. The individual who serves as the incident safety officer for special operations incidents shall have the appropriate education, training, and experience in special operations.
- **6.6.2** The incident safety officer shall attend strategic and tactical planning sessions and provide input on risk assessment and member safety.
- **6.6.3** The incident safety officer shall ensure that a safety briefing, including an incident action plan and an incident safety plan, is developed and made available to all members on the scene.
- **6.6.4** The incident safety officer shall meet with the incident commander to determine rehabilitation, accountability, or rapid intervention needs. For long-term operations, the incident safety officer shall ensure that food, hygiene facilities, and any other special needs are provided for members.

6.7 Accident Investigation and Review.

- **6.7.1** Upon notification of a member injury, illness, or exposure, the incident safety officer shall immediately communicate this to the incident commander to ensure that emergency medical care is provided.
- **6.7.2** The incident safety officer shall initiate the accident investigation procedures as required by the fire department.
- **6.7.3** In the event of a serious injury, fatality, or other potentially harmful occurrence, the incident safety officer shall request assistance from the health and safety officer.

6.8 Postincident Analysis.

6.8.1* The incident safety officer shall prepare a written report for the postincident analysis that includes pertinent information about the incident relating to safety and health issues. The incident safety officer shall participate in the postincident analysis.

6.8.2 The incident safety officer shall include information about issues relating to the use of protective clothing and equipment, personnel accountability system, rapid intervention crews, rehabilitation operations, and other issues affecting the safety and welfare of members at the incident scene.

Annex A Explanatory Material

Annex A is not a part of the requirements of this NFPA document but is included for informational purposes only. This annex contains explanatory material, numbered to correspond with the applicable text paragraphs.

A.3.2.1 Approved. The National Fire Protection Association does not approve, inspect, or certify any installations, procedures, equipment, or materials; nor does it approve or evaluate testing laboratories. In determining the acceptability of installations, procedures, equipment, or materials, the authority having jurisdiction may base acceptance on compliance with NFPA or other appropriate standards. In the absence of such standards, said authority may require evidence of proper installation, procedure, or use. The authority having jurisdiction may also refer to the listings or labeling practices of an organization that is concerned with product evaluations and is thus in a position to determine compliance with appropriate standards for the current production of listed items.

A.3.2.2 Authority Having Jurisdiction (AHJ). The phrase "authority having jurisdiction," or its acronym AHJ, is used in NFPA documents in a broad manner, since jurisdictions and approval agencies vary, as do their responsibilities. Where public safety is primary, the authority having jurisdiction may be a federal, state, local, or other regional department or individual such as a fire chief; fire marshal; chief of a fire prevention bureau, labor department, or health department; building official; electrical inspector; or others having statutory authority. For insurance purposes, an insurance inspection department, rating bureau, or other insurance company representative may be the authority having jurisdiction. In many circumstances, the property owner or his or her designated agent assumes the role of the authority having jurisdiction; at government installations, the commanding officer or departmental official may be the authority having jurisdiction.

A.3.3.26 Industrial Fire Department. Industrial fire departments should be distinguished from industrial fire brigades. Industrial fire departments are similar in mission to municipal fire departments and usually employ fire apparatus, mobile water supplies, large-diameter hose, and specialized equipment based on the site-specific hazards present within the occupancy. These occupancies can have separate organizations, covered by separate organizational statements, operating as industrial fire brigades or teams providing rescue unrelated to fire incidents. Membership in these organizations can overlap.

A.3.3.38 Standard Operating Procedure. It is a requirement of the authority having jurisdiction to develop and utilize a policy or guideline for organizational directives for the operation of the fire department.

A.4.1.1 The fire chief is responsible for the overall management and authority of the fire department, including member safety and health. The fire chief delegates this responsibility to

- a health and safety officer. The health and safety officer is the program manager or administrator of the occupational safety and health program.
- **A.4.1.3** The determination of whether the fire department safety officer will be a full-time or part-time assignment should be made by the fire chief. This should depend on the size and structure of the organization, the activity level, the level of risk in the fire department's work environment, and the history of accidents, injuries, occupational illnesses, fatalities, and exposures.
- **A.4.1.3.2** A large fire department should have one or more assistant health and safety officer(s) working in the area of safety and health, under the direction of the health and safety officer. A small department can have one individual assigned as the health and safety officer, which can be on a part-time basis. This individual can depend upon assistance from members of the occupational safety and health committee, who have expertise in various areas of fire fighter safety and health.
- **A.4.1.4.1** There are circumstances at emergency incidents that require the immediate response or attention of the incident safety officer. It is unrealistic to assume that one individual would be available on a continual basis to fulfill these requirements. The system should provide for additional assistant incident safety officers to assume these responsibilities in the absence of the incident safety officer. The response of the incident safety officer to an emergency incident might be delayed by distance, simultaneous events, or other circumstances. When the need for an incident safety officer is a priority at an incident scene and none is available, the incident commander should assign a qualified member to establish a safety unit and assume those duties and responsibilities on a temporary basis. All members should be aware of the basic functions and responsibilities of the incident safety officer at an incident scene.
- **A.4.2.2** The standard requires the health and safety officer to have and maintain a knowledge of current applicable laws, codes, and standards. Such current knowledge requires continuing efforts to be aware of the developing bodies of knowledge and experience pertaining to fire service occupational safety and health. This can be gained through reading journals and periodicals, attending classes and seminars, and regularly reviewing additions and changes in applicable laws, codes, and standards.
- **A.4.2.3** The health and safety officer must recognize safety and health hazards associated with emergency operations and know how to reduce the severity of these hazards. Safety and health hazards can be identified as, but not limited to, respiratory hazards, exposure to communicable diseases and hazardous materials, failure to wear or improper use of protective clothing and equipment, and apparatus and vehicle safety.
- **A.4.2.4** The health and safety officer must utilize safety management as a basis for establishing the fire department's occupational safety and health program. This process includes accident prevention, accident investigation, identifying unsafe acts and unsafe conditions, accident and injury analysis, training and education, and use of protective clothing and equipment.
- **A.4.2.5** The health and safety officer must be familiar with health maintenance issues such as disabling injuries and illnesses, respiratory and heart diseases, cancer and related diseases, a

medical monitoring program for members, the need for members to maintain an appropriate level of fitness, and wellness programs for fire fighters.

- **A.4.2.6** The health and safety officer can utilize NFPA 1581, *Standard on Fire Department Infection Control Program*, to develop and implement an infection control program and serve as a resource for infection control issues.
- **A.4.4.2** It is imperative that the member who functions as the incident safety officer be qualified to assume this function. Training, experience, and knowledge in incident scene operations are excellent qualifiers for an incident safety officer. The incident safety officer must have an understanding of the operations of the particular incident, the hazards associated with these operations, risk management, incident management system, and personnel accountability.
- **A.4.4.3** Safety and health hazards could include lack of or improper use of protective clothing and equipment, structural conditions, scene safety, infection control, hazardous materials, conditions associated by technical rescue incidents, personnel accountability, or any hazard that affects the safety and health of personnel operating at the incident scene.
- **A.4.4.4** Identification of building construction problems or concerns has a direct impact on fire fighter safety. The incident safety officer must be able to identify building conditions such as truss roof construction, lightweight truss construction, fire protection systems, reinforcement rods, interior cables secured by stars or plates, and/or any other building construction factor that affects fire fighter safety. Prefire planning must be incorporated into this process.
- **A.4.4.6** Incident scene "rehab" is a critical part of incident scene safety. The incident safety officer is not responsible for establishing "rehab," but must ensure that this tactical level management unit is established and adequately staffed with personnel and resources. The key components of the "rehab" process are rest, hydration, and medical monitoring.
- **A.5.1.1** Risk management is a vital component to any organization's operation, especially a fire department. The health and safety program is one of many elements that comprise the risk management process. The risk management process enables an organization to control the risks associated with fire department operations. Due to the inherent risks faced by members during emergency and nonemergency operations, a risk management plan will reduce the frequency and severity of risks.
- **A.5.2.1** A sample safety procedure or statement can read as follows: It is the intent of the Anytown Fire Department to provide for the safety, health, and welfare of all its members. Through the implementation of the occupational safety and health program, our goal is to reduce the frequency and severity of accidents, injuries, occupational illnesses, and occupational exposures. The occupational safety and health program governs all activities, emergency and nonemergency, of all members of this department and of any other persons involved in fire department operations.
- **A.5.3.1** The health and safety officer is not the only safety trainer. To fulfill the function of safety trainer properly, even in a small fire department, the health and safety officer should act as a clearinghouse for information and training programs related to occupational safety

and health.

- **A.5.6.1** Data management refers to the collection and assimilation of information related to fire department safety and health and the use of this data to enhance the efforts of the occupational safety and health program. The data management process serves several important functions, as follows:
- (1) It provides a summary of fire department experience in different categories (i.e., fire fighter injuries, vehicular accidents, work-related illnesses).
- (2) It provides a measure of how the experience of a particular fire department compares with other fire departments, with national trends, and with other occupations or industries.
- (3) It provides a systematic method to record information for future reference and use.

Data management provides a means of determining trends and program effectiveness, whether problems are becoming worse, whether accidents and injuries are being reduced, and whether the costs associated with accidents and injuries are increasing or decreasing.

Occupational safety and health laws require employers to maintain records of job-related injuries and illnesses.

A.6.1.1 The function of incident scene safety must be carried out at all incidents. It is the responsibility of the incident commander who cannot perform this function due to the size or complexity of the incident to assign or request response of an incident safety officer to this function. There are, however, incidents that require immediate response or appointment of an incident safety officer, such as a hazardous materials incident or special operations incidents. These types of incidents should be defined in the fire department's response policy or procedure to ensure that the incident safety officer responds. Likewise, some situations require an incident safety officer to respond after members are on the scene, such as a working fire or at the request of the incident commander.

A.6.1.2 A fire department should develop response procedures for an incident safety officer that is on call or designated to respond. Examples could be as follows:

- (1) Commercial fire
- (2) Multiple alarm
- (3) Fire fighter injury or fire fighter transported for treatment
- (4) Hazardous materials incident
- (5) Technical rescue incident
- (6) At the request of the incident commander

A.6.1.3 This can be accomplished by wearing a highly visible vest, helmet, or other indicator.

A.6.2.9 The need, size, complexity, or duration of an incident can necessitate the need for additional assistant incident safety officers. Incidents such as high-rise fires, hazardous materials incidents, and special operations require additional assistance. In these cases, the Copyright NFPA

incident safety officer should inform the incident commander of the need to establish a safety unit. Under the direction of the incident safety officer, assistant incident safety officers can be assigned to handle scene monitoring, action planning, risk management, interior safety at a high-rise incident, or operations safety at hazardous materials incidents or special operations, or serve as relief for the incident safety officer during extended incident operations.

- **A.6.5.1** Hazardous materials incidents require an incident safety officer for the following:
- (1) Potential risks to members
- (2) Substantial number of members to control an incident
- (3) Duration of the incident
- **A.6.5.2** Due to the knowledge and expertise required at a hazardous materials incident, the incident safety officer needs to have an understanding of these operations. This can be achieved by being trained to the Hazardous Materials Technician level of NFPA 472, Standard for Professional Competence of Responders to Hazardous Materials Incidents.
- **A.6.6.1** Some functions are performed best by individuals with specific expertise, particularly in highly technical areas. The fire department should endeavor to have more than one qualified individual to perform all essential functions within the incident management system.
- **A.6.8.1** The incident safety officer should document pertinent information about the incident, including assignments given by the incident commander, the incident safety plan, procedures that worked well, obstacles encountered and how to correct them, and significant accidents and/or injuries.

It is important to include successful or positive actions as well as those actions that require training or procedural changes to improve incident safety and health for all members.

Annex B Informational References

B.1 Referenced Publications.

The following documents or portions thereof are referenced within this standard for informational purposes only and are thus not part of the requirements of this document unless also listed in Chapter 2.

B.1.1 NFPA Publications. National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.

NFPA 472, Standard for Professional Competence of Responders to Hazardous Materials Incidents, 2002 edition.

NFPA 1581, Standard on Fire Department Infection Control Program, 2000 edition.

B.1.2 Other Publications. (Reserved)

B.2 Informational References. (Reserved)

B.3 References for Extracts. (Reserved)

Click here to view and/or print an Adobe® Acrobat® version of the index for this document