

Firefighter Training and Education: Best Practices

The Division of Homeland Security and Emergency Services recommends minimum training standards based on firefighter tasks or positions to provide guidance and promote best practices for firefighter training and education in the State of New York, pursuant to section 709 (u) of the Executive Law.

These best practices are applicable to all firefighters assigned to the tasks or positions listed below, including probationary firefighters appointed pursuant to section 58-a of the Civil Service Law who have not yet completed a certified basic fire training program that meets the requirements of 19 NYCRR Part 426.

Nothing in these best practices is intended to limit an Authority Having Jurisdiction from establishing training requirements which exceed the recommended standards set forth herein.

A. Exterior Firefighters:

It is recommended that firefighters assigned to exterior firefighting operations [i.e. operations outside an Immediately Dangerous to Life and Health (IDLH) atmosphere] complete, at a minimum, training meeting or exceeding the following in order to operate safely on the fire ground or at an emergency scene:

1. Knowledge and skill requirements for scene support functions including:
 - a. Fire safety;
 - b. Tool and scene safety;
 - c. Fire behavior and development;
 - d. Personal protective equipment (PPE) and self-contained breathing apparatus (SCBA) practices (excluding donning and doffing of SCBA);
 - e. Fire service communication;
 - f. Incident management principles (see #4 below);
 - g. Fire prevention principles;
 - h. Arson awareness;
 - i. Fire extinguishers;
 - j. Hose practices, nozzles and fire streams; (excluding interior structural fire attack);
 - k. Water supply;
 - l. Ground ladder operations; and
 - m. Ropes and knots.

The Scene Support Operations course conducted by the NYS Office of Fire Prevention and Control meets these requirements.

2. Hazardous Materials Operations level knowledge and skill requirements including:
 - a. Recognition of the presence of hazardous materials/weapons of mass destruction (WMD) and identification of those materials;
 - b. Understanding of basic hazardous materials terms;

- c. Surveying an incident to collect hazard and response information;
- d. Predicting the likely behavior of a hazardous material and its container;
- e. Estimating likely harm;
- f. Recognizing the abilities and limitations of the personal protective equipment provided by the Authority Having Jurisdiction (AHJ);
- g. Performing basic control, containment and/or confinement operations within the capabilities of the resources and personal protective equipment available locally;
- h. Planning an initial response to a hazardous materials/WMD incident within capabilities of available responders and equipment;
- i. Identifying action options;
- j. Implementation of an initial response to a hazardous materials/WMD incident including initiation of the incident management system, establishment and enforcement of control zones, determining suitability of personal protective equipment, providing for emergency decontamination and communication of the planned response through the chain of command; and
- k. Conducting an ongoing evaluation of the status of a hazardous materials incident to ensure response objectives are being met safely, effectively and efficiently while recognizing circumstances where it would be prudent to withdraw from the incident.

The Hazardous Materials First Responder Operations course conducted by the New York State Office of Fire Prevention and Control meets these requirements.

- 3. Emergency medical care training including infection control, bleeding control, CPR and shock management.
- 4. National Incident Management System (NIMS) I-700 and I-100 courses.

This training serves to meet or exceed the initial training requirements established for firefighters by the New York State Department of Labor in the following categories:

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| 1. General hazard recognition: | 1 hour |
| 2. Fire station safety: | 2 hours |
| 3. Response safety: | 2 hours |
| 4. Fire scene safety: | 2 hours |
| 5. Protective clothing: | 3 hours |
| 6. Self-Contained Breathing Apparatus: | 3 hours* |
| 7. Tool and equipment safety: | 2 hours |

* Training specific to SCBA should be consistent with the duties assigned.

B. Interior Structural Firefighters:

It is recommended that firefighters assigned to interior structural firefighting operations complete, at a minimum, training meeting or exceeding the following:

1. The knowledge and skill requirements of NFPA 1001 Standard for Professional Firefighter Qualifications, 2008 ed., Chapter 5 Firefighter I. This training should be completed prior to being assigned to interior structural firefighting operations during an emergency incident.
 - a. Initiating a response to a reported emergency;
 - b. Fire service communications;
 - c. Use of self-contained breathing apparatus (SCBA) during emergency operations;
 - d. Responding on fire apparatus to an emergency incident;
 - e. Scene safety and operating at an emergency incident;
 - f. Forcible entry;
 - g. Operating as a team member within a hazardous area;
 - h. Ground ladder operations;
 - i. Vehicle fires;
 - j. Outside or exterior fires and defensive operations;
 - k. Structure fire search and rescue operations;
 - l. Interior fire attack;
 - m. Horizontal and vertical ventilation;
 - n. Overhaul;
 - o. Salvage and property conservation;
 - p. Water supply;
 - q. Fire chemistry and behavior;
 - r. Fire extinguisher operations;
 - s. Ground cover fires;
 - t. Fire equipment, hose and PPE inspection and maintenance; and
 - u. The requirements of NFPA 472 Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents, 2008 ed., Chapter 5 Core Competencies for Operations Level Responders, Section 6.2 Mission Specific Competencies: Personal Protective Equipment and Section 6.6 Mission Specific Competencies: Product Control.

The Firefighter I training course conducted by the NYS Office of Fire Prevention and Control meets these requirements.

2. Emergency medical care training including infection control, bleeding control, CPR and shock management.
3. National Incident Management System (NIMS) I-700 and I-100 courses.

This training serves to meet or exceed the initial training requirements established for firefighters by the New York State Department of Labor in the following categories:

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| 1. General hazard recognition: | 1 hour |
| 2. Fire station safety: | 2 hours |
| 3. Response safety: | 2 hours |
| 4. Fire scene safety: | 2 hours |
| 5. Protective clothing: | 3 hours |
| 6. Self-Contained Breathing Apparatus: | 3 hours |
| 7. Tool and equipment safety: | 2 hours |

C. Medical Qualification:

All firefighters should be medically qualified to perform the duties they are assigned, in accordance with the requirements established by the Authority Having Jurisdiction (AHJ). Periodic re-evaluation of this medical qualification should occur at intervals established by the Authority Having Jurisdiction, consistent with those assigned duties. It is recommended that such re-evaluation occur annually.

D. Minimum Annual In-service Training:

To comply with the requirements established for firefighters by the New York State Department of Labor all firefighters are required to receive annual in-service training consisting of, at a minimum, 8 hours in the following topic areas:

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| 1. General hazard recognition: | 30 minutes |
| 2. Fire station safety: | 30 minutes |
| 3. Response safety: | 45 minutes |
| 4. Fire scene safety: | 75 minutes |
| 5. Protective clothing: | 1 hour |
| 6. Self-Contained Breathing Apparatus: | 2 hours* |
| 7. Tool and equipment safety: | 1 hour |
| 8. Recent developments in fire safety: | 1 hour |

* Training specific to SCBA should be consistent with the duties assigned.

To ensure that firefighters can operate safely and effectively, the Division of Homeland Security and Emergency Services recommends that an Authority Having Jurisdiction establish in-service training requirements for all firefighters, consistent with their assigned duties, which exceed these minimums.

To comply with the minimum requirements of OSHA 29 CFR 1910.156(c)(2), firefighters assigned to interior structural firefighting duties should be provided with an educational session or training at least

quarterly. It is recommended that an Authority Having Jurisdiction exceed this minimum and require that interior structural firefighters participate in a drill or training session at least monthly.

To comply with the requirements of OSHA 29 CFR 1910.1030, all firefighters should complete initial and annual refresher training addressing bloodborne pathogens, other infectious diseases to which they may be exposed, protective equipment and procedures available for exposure prevention and reporting requirements and procedures to document any potential exposure.

To comply with the requirements of OSHA 29 CFR 1910.120(q)(8) all firefighters should complete refresher training or demonstrate competency annually at the Hazardous Materials First Responder Operations or higher level consistent with their level of training and assigned duties.

E. Apparatus Operators:

In addition to the recommended training specified for Exterior or Interior Firefighters above, it is recommended that all firefighters assigned to operate fire apparatus or fire department vehicles complete, at a minimum, training meeting or exceeding the knowledge and skill requirements of NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications, Chapter 4: General Requirements for each type of apparatus or vehicle they are expected to operate, including:

1. Performing the routine preventive maintenance, inspection and service of the vehicle's systems and components and the equipment, tools and appliances mounted on or assigned to that vehicle and correcting any deficiencies noted;
2. Documentation of the routine maintenance, inspection and service of the vehicle's systems and components and the equipment, tools and appliances mounted on or assigned to that vehicle, any deficiencies noted during this process and any corrective actions taken to address those deficiencies;
3. Safe operation of the vehicle in compliance with applicable laws, regulations and standards, during routine driving and emergency responses;
4. Defensive driving practices;
5. Safely maneuvering the vehicle around obstructions and in restricted spaces in both forward and reverse;
6. Safe backing procedures and the use of a spotter;
7. Operational capabilities and limitations of the vehicle, its systems and components and equipment, tools and appliances mounted on or assigned to that vehicle; and
8. Operation of the tools, equipment and appliances mounted on or assigned to the vehicle.

The Apparatus Operator: Emergency Vehicle Operations course conducted by the NYS Office of Fire Prevention and Control, in addition to local training specific to the apparatus or vehicle(s) to be operated, meets the above requirements.

F. Fire Officers:

It is recommended that to be capable of appointment or election to a Fire Officer position a firefighter shall have completed, at a minimum, training meeting or exceeding:

1. The knowledge and skill requirements of NFPA 1021 Standard for Fire Officer Professional Qualifications, Chapter 4 Fire Officer I, Sections 4.2 through 4.7, including:
 - a. Safe and effective assignment and supervision of tasks or responsibilities to unit members at emergency incidents, during training and under routine or non-emergency conditions;
 - b. Direction of members during training;
 - c. Human resource management and administration, including employee assistance program administration ;
 - d. Administrative policies and procedures and records management, including incident reports, budgets, and personnel records;
 - e. Fire Inspection procedures and reports;
 - f. Building construction and fire behavior;
 - g. Scene security and evidence preservation;
 - h. Developing and implementing an incident action plan;
 - i. Post-incident analysis;
 - j. Safety, including injury and accident prevention;
 - k. Initial accident investigation; and
 - l. Firefighter health and wellness.

Completion of the Fire Officer I (NFPA 1021 2009) course conducted by the New York State Office of Fire Prevention and Control meets these training requirements.

2. National Incident Management System (NIMS) I-200.

Completion of this training meets the requirement established by OSHA 29 CFR 1910.156 (c)(1) that fire brigade leaders [i.e. fire officers] receive more comprehensive training than the general membership of a fire brigade [i.e. firefighters].

G. Additional Fire Officer Training:

Pre-requisite completion of the requirements of NFPA 1001 Firefighter II and NFPA 1041 Fire Instructor I is required for Fire Officer I certification pursuant to NFPA 1021 Standard for Fire Officer Professional Qualifications. It is recommended, where practical, that fire officers comply with the NFPA 1021 Fire Officer I requirements in their entirety.

Completion of training meeting or exceeding the requirements of NFPA 1021 Standard for Fire Officer Professional Qualifications, Chapter 5 Fire Officer II should be considered for Fire Officer positions and

responsibilities beyond the company officer or first line supervisory level. Completion of the Fire Officer II, Fire Service Instructor I and Principles of Fire Investigation courses conducted by the New York State Office of Fire Prevention and Control meets the training requirements of that chapter.

Completion of training meeting or exceeding the requirements of NFPA 1021 Standard for Fire Officer Professional Qualifications, Chapter 6 Fire Officer III and the National Incident Management (NIMS) I-300 course should be considered for the Chief of Department , Assistant Chief and Deputy Chief positions. Completion of the Fire Officer III course conducted by the New York State Office of Fire Prevention and Control meets the training requirements of NFPA 1021, Chapter 6.