**Personal Protective Equipment**

**1   PURPOSE AND SCOPE**

The purpose of this policy is to reasonably protect members by providing and maintaining, at no cost to the member, personal protective equipment (PPE), safety devices, and safeguards for workplace activities.

**2   POLICY**

It is the policy of the Department to provide PPE and safeguards of the proper type, design, strength, and quality needed to reasonably eliminate, preclude, or mitigate a hazard.

The Department should also establish a written maintenance, repair, servicing, and inspection program for protective clothing and equipment to reduce the safety and health risks associated with improper selection, poor maintenance, inadequate care, excess wear, and improper use of PPE.

**3   PPE STANDARDS AND REQUIREMENTS**

The Department will provide approved PPE that is appropriate for the hazard to members who are located in a workplace where there is a risk of injury. Members should be expected to wear the PPE any time there is a risk of exposure to a hazard. PPE should include all of the following guidelines, requirements, and standards (29 CFR 1910.132):

1. The PPE provided should minimally meet the standards approved by the American National Standards Institute (ANSI) or other recognized authority.
2. When no authoritative standard exists for PPE or a safety device, the use of such equipment should be subject to inspection and acceptance or rejection by the officer in charge of the ﻿division﻿ where the equipment will be used.
3. PPE should be distinctly marked so as to facilitate easy identification of the manufacturer.
4. The training officer should ensure that the member is properly instructed and uses PPE in accordance with the manufacturer's instructions.
5. The Department should ensure that all PPE, whether provided by the Department or the member, complies with the applicable state standards.
6. Members are responsible for maintaining their assigned PPE in a safe and sanitary condition.
7. Supervisors are responsible for ensuring that all PPE is maintained in a safe and sanitary condition.
8. PPE should be of such design, fit, and durability as to provide adequate protection against the hazards for which they are designed.
9. PPE should be reasonably comfortable and should not unduly encumber member movements that are necessary to perform work.

3.1   HEAD PROTECTION

Members working in locations where there is a risk of head injuries from flying or falling objects and/or electric shock and burns should wear an approved protective helmet. Each protective helmet should bear the original marking required by the ANSI standard under which it was approved. At a minimum, the marking should identify the manufacturer, the ANSI designated standard number and date, and the ANSI designated class of helmet. Where there is a risk of injury from hair entanglements in moving parts of machinery, combustibles, or toxic contaminants, members should confine their hair to eliminate the hazard (29 CFR 1910.135).

3.2   FACE AND EYE PROTECTION

Members working in locations where there is a risk of eye injuries, such as punctures, abrasions, contusions, or burns from contact with flying particles, hazardous substances, projectiles, or injurious light rays that are inherent in the work or environment, should be safeguarded by means of face or eye protection. Suitable screens or shields isolating the hazardous exposure may be considered adequate safeguarding for nearby members. The Department should provide and require that members wear approved face and eye protection suitable for the hazard and in accordance with previously cited national standards (29 CFR 1910.133).

3.3   BODY PROTECTION

Body protection may be required for members whose work exposes parts of their bodies that are not otherwise protected from hazardous or flying substances or objects. Clothing appropriate for the work being done should be worn. Loose sleeves, tails, ties, lapels, cuffs, or other loose clothing that can be entangled in moving machinery should not be worn. Clothing saturated with flammable liquids, corrosive substances, irritants, or oxidizing agents should either be removed and not worn until properly cleaned, or should be destroyed (29 CFR 1910.132).

3.4   HAND PROTECTION

Hand protection should be required for members whose work involves unusual and excessive exposure of hands to cuts, burns, harmful physical or chemical agents, or radioactive materials that are encountered and capable of causing injury or impairment.

Hand protection (e.g., gloves) should not be worn where there is a danger of the hand protection becoming entangled in moving machinery or materials. Use of hand protection around smooth-surfaced rotating equipment does not constitute an entanglement hazard if it is unlikely that the hand protection will be drawn into the danger zone.

Wristwatches, rings, or other jewelry should not be worn while working with or around machinery with moving parts in which such objects may be caught or around electrical equipment (29 CFR 1910.138).

3.5   FOOT PROTECTION

Appropriate foot protection should be required for members who are exposed to foot injuries from electrical hazards; hot, corrosive, or poisonous substances; falling objects; or crushing or penetrating actions, or who are required to work in abnormally wet locations. Footwear that is defective or inappropriate to the extent that its ordinary use creates the possibility of foot injuries should not be worn. Footwear should be appropriate for the hazard and should comply with recognized national standards (29 CFR 1910.136).

**4   SELECTION, CARE, AND MAINTENANCE OF PPE**

PPE exists to provide the member with an envelope of protection from multiple hazards and repeated exposures. For structural firefighting, PPE is a system of components designed to work as an ensemble. Typical firefighting PPE consists of a hood, helmet, jacket, trousers, gloves, wristlets, and footwear. A program for selection, care, and maintenance of PPE consists of the following.

4.1   SELECTION

The PPE selection process should be conducted through a labor-management committee utilizing members from various operational ranks and representatives from administrative staff.

Prior to procurement, a risk assessment may be performed to include expected hazards, frequency of use, past experiences, geographic location, and climatic conditions. The selection process should evaluate comparative information on all ensemble elements to ensure they will interface and perform based on the risk assessment. The process should consider the following:

1. PPE performance expectations, to include thermal and physiological effects
2. Style and design for user comfort and wear performance
3. Construction for quality, durability, and garment life
4. Manufacturer ability to meet performance demand requirements, technical information, service, warranty, and customer support needs

4.2   INSPECTION

There are two primary types of PPE inspection:

**Routine inspection** - Each member should conduct a routine inspection of the member’s issued PPE each time the elements are exposed or are suspected of having been exposed to damage or contamination.

1. Coat, trouser, gloves, and hood should be checked for the following:
2. Soiling
3. Contamination from hazardous materials or biological agents
4. Physical damage, such as:
5. Rips, tears, and cuts
6. Damaged/missing hardware and closure systems
7. Thermal damage, such as charring, burn holes, and melting
8. Damaged or missing reflective trim
9. Shrinkage
10. Loss of elasticity or flexibility at openings
11. Helmets should be checked for the following:
12. Soiling
13. Contamination from hazardous materials or biological agents
14. Physical damage to the shell, such as:
15. Cracks, crazing (small cracks), dents, and abrasions
16. Thermal damage to the shell, such as bubbling, soft spots, warping, or discoloration
17. Physical damage to ear flaps, such as:
18. Rips, tears, and cuts
19. Thermal damage, such as charring, burn holes, and melting
20. Damaged or missing components of suspension and retention systems
21. Damaged or missing components of the goggle system including:
22. Discoloration
23. Crazing (small cracks)
24. Scratches to goggle lens, limiting visibility
25. Damaged or missing reflective trim
26. Footwear should be checked for the following:
27. Soiling
28. Contamination from hazardous materials or biological agents
29. Physical damage, such as:
30. Cuts, tears, and punctures
31. Thermal damage, such as charring, burn holes, and melting
32. Exposed or deformed steel toe, steel midsole, and shank
33. Loss of water resistance

**Advanced inspection** - Advanced inspection of PPE ensembles and elements should be conducted a minimum of every 12 months or whenever routine inspections indicate a problem may exist.

Advanced inspections should only be conducted by trained and certified members or a manufacturer-approved vendor certified to conduct advanced inspections. All findings from advanced inspections should be documented on an inspection form. Universal precautions should be observed, as appropriate, when handling elements. Advanced inspections should include, at a minimum, the inspection criteria outlined in the NFPA 1851 standard.

4.3   CLEANING AND DECONTAMINATION

The following rules and restrictions should apply to the cleaning and decontamination of PPE:

1. Soiled and contaminated PPE elements should not be taken home, washed in the home, or washed in public laundries unless the business is dedicated to handling firefighting protective clothing.
2. Commercial dry cleaning should not be used.
3. The Department will examine the manufacturer’s label and user information for specific cleaning instructions.
4. Chlorine bleach or chlorinated solvents should not be used to clean or decontaminate PPE elements.
5. Scrubbing or spraying with high-velocity water jets, such as a power washer, should not be used.
6. All contract cleaning or decontamination businesses should demonstrate procedures for cleaning and decontamination that do not compromise the performance of PPE ensembles and elements. Department standards identify and define three primary types of cleaning: routine, advanced, and specialized.
7. **Routine cleaning** - After each use, any elements that are soiled should receive routine cleaning. It is the member’s responsibility to routinely clean the member’s PPE ensemble or elements using the following process:
8. When possible, initiate cleaning at the incident scene.
9. Brush off any dry debris.
10. Gently rinse off debris with a water hose.
11. If necessary, scrub gently with a soft bristle brush and rinse off again if necessary. Spot clean utilizing a utility sink.
12. Inspect for soiling and contamination and repeat the process if necessary.
13. All elements should be air-dried in an area with good ventilation. Do not dry in direct sunlight or use a machine dryer.
14. **Advanced cleaning** - Should routine cleaning fail to render the elements clean enough to be returned to service, advanced cleaning is required. In addition, elements that have been issued, used, and soiled should undergo advanced cleaning every six months, at a minimum.
15. The ﻿department’s Health and Safety Officer (HSO) should manage all advanced cleaning utilizing a qualified contract cleaner.
16. Advanced cleaning will be coordinated with the HSO by either the crew or by the individual. Loaner PPE will be provided for any member scheduled to work.
17. Station laundering machines should not be used to clean PPE elements.
18. **Specialized cleaning** - PPE elements that are contaminated with hazardous materials or biological agents should undergo specialized cleaning as necessary to remove the specific contaminants.
19. The PPE elements that are contaminated or suspected to be contaminated should be isolated, tagged, bagged, and removed from service until they undergo specialized cleaning to remove the specific contaminant. All bagged PPE should include the member’s name, company, and shift. Universal precautions should be observed when handling known or suspected contaminated PPE elements. For more information on decontamination of PPE after exposure, refer to the Communicable Diseases Policy.
20. The ﻿﻿﻿department﻿’s HSO should manage all specialized cleaning and will utilize a qualified contract cleaner. The ﻿Department, if possible, should identify the suspected contaminant and consult the manufacturer for an appropriate decontamination agent and process.

4.4   REPAIR OF PPE

The ﻿﻿﻿department’s HSO should manage all PPE repairs utilizing a manufacturer-recognized repair facility. All elements should be subject to an advanced or specialized cleaning before any repair work is done. Loaner PPE is available to members while repairs are being made.

4.5   ISSUING PPE

All PPE ensembles or elements should be issued through the ﻿department’s HSO. All fittings should be completed by the HSO and/or by a manufacturer's representative.

* Members should only use department-issued PPE.
* Members should minimize the public’s exposure to soiled or contaminated PPE and avoid wearing PPE to non-fire related emergencies.
* Members should not wear PPE inside station living quarters or other department facilities.

4.6   STORAGE OF PPE

The parameters for the storage of all PPE ensembles or elements include the following:

1. PPE should not be stored in direct sunlight or exposed to direct sunlight when it is not being worn.
2. PPE should be clean, dry, and well-ventilated before storage.
3. PPE should not be stored in airtight containers unless the container is new and unused.
4. PPE should not be stored at temperatures below 40 degrees F or above 180 degrees F.
5. PPE should be stored in a protective case or bag to prevent damage if stored in compartments or trunks.
6. PPE should not be subjected to sharp objects, tools, or other equipment that could damage the ensemble or elements.
7. PPE should not be stored inside living quarters or with personal belongings, or taken or transported within the passenger compartment of personal vehicles unless it is stored in a protective case or bag.
8. PPE should not be stored in contact with hydraulic fluids, solvents, hydrocarbons, hydrocarbon vapors, or other contaminants.

4.7   PPE TRAINING

The training officer should be responsible for the following:

1. Upon issue, all members should be provided training on this policy along with the manufacturer’s written instructions on the care, use, and maintenance of their PPE, including any warnings issued by the manufacturer.
2. New members should receive training in the care, use, and maintenance of their PPE before participating in live fire training or operations. All others should receive training as needed when PPE ensembles or elements are upgraded or changed.

4.8   PPE RECORD KEEPING

The Department should maintain or require contracted vendors to maintain records on all structural firefighting ensembles or elements to include:

1. The name of the member to whom the element is issued.
2. The date and condition of the element when issued.
3. The manufacturer, model name, or design.
4. The manufacturer’s identification number, lot number, or serial number.
5. The month and year of manufacture.
6. The dates and findings of all advanced inspections.
7. The dates of advanced cleaning, specialized cleaning, or decontamination, and by whom it was performed.
8. The date of any repairs, the person who repaired the PPE, and a brief description of the repair.
9. The date the element was removed from service (retirement).
10. The date and method the element was disposed.

4.9   PPE RETIREMENT

All PPE ensembles and elements that are worn or damaged to the extent that the Department deems that it is not possible or cost-effective to repair should be retired. All PPE ensembles and elements that are no longer useful for emergency operations but are not contaminated, defective, or damaged should be retired.

Retired PPE ensembles and elements should be destroyed or disposed of by the Department in a manner ensuring that they will not be used in any firefighting or emergency activities, including training. Retired PPE may only be used for training when that training does not include live fire. Any PPE used for training should be clearly marked: “Training only. No live fire.”

4.10   SPECIAL INCIDENT PROCEDURE

If any member suffers a serious injury or death while wearing PPE, the following procedure should be followed:

1. The PPE will immediately be removed from service.
2. Custody of the PPE will be maintained by the Chief or the authorized designee, and the PPE should be kept in a secure location with controlled, documented access.
3. All PPE should be non-destructively tagged and stored only in paper or cardboard containers to prevent further degradation or damage. Plastic airtight containers should not be used.
4. The PPE should be made available to the ﻿﻿﻿department’s investigation team or outside experts as approved by the Chief or the authorized designee, to determine the condition of the PPE.
5. The Chief or the authorized designee should determine the retention period for storage of the PPE.

**IMPLEMENTATION GUIDANCE**

***The following information is provided to assist you in implementing this policy and should be deleted before the policy is issued to agency personnel.***

**Personal Protective Equipment**

This policy is being provided to contribute to the ongoing discussions and actions regarding COVID-19 (coronavirus disease 2019).

This policy is intended as a starting point for fire departments preparing policies for dealing with communicable diseases such as COVID-19 and exposure to the coronavirus. This is a national-level policy and does not include applicable state or local requirements.

Lexipol is not your agency's policy maker. Your agency is responsible for reviewing, customizing, and adopting any version of this policy for your agency. Neither the policy nor any information provided should be considered to contain legal advice or opinions. You should contact your legal counsel to obtain legal advice.

The policy is intended to provide guidelines to ensure department members are reasonably protected by providing and maintaining, at no cost to the member, personal protective equipment (PPE), safety devices and safeguards for workplace activities. It addresses basic risk-reduction measures associated with cleaning PPE as well as general maintenance and inspections.

This policy references federal OSHA regulations regarding PPE. These are included as best practices even if your agency is not required to comply with the regulations.

Additionally, workplace safety divisions are useful resources that may review your operations at no cost and may not penalize your organization if corrective action is needed or recommended. We suggest that you consult this resource to identify any additional provisions they recommend including in this policy.

**CUSTOMIZATION**

You should customize this policy to meet your department’s practice, paying particular attention to the following sections:

**SELECTION, CARE AND MAINTENANCE OF PPE:** Carefully review all subsections under this section and modify to conform to existing department practices and emerging guidelines.

**CLEANING AND DECONTAMINATION, REPAIR OF PPE, and ISSUING PPE:** These subsections reference a Health and Safety Officer; if your department does not have this position or calls it something else, modify to conform to existing department practices and emerging guidelines.