



MECKLENBURG EMS AGENCY

Personal Protective Equipment

Purpose

The purpose of this policy is to define personal protective equipment and to outline when and how to use it. Within this policy, you will also find the rules for conducting hazard assessments and who will be responsible for ensuring they are complete. The agency provides all employees with required PPE to suit the task and known hazards.

This policy covers the basic requirements for personal protective equipment. PPE used for respiratory protection or PPE required for the prevention of blood borne illness/disease has additional requirements that can be found in the policies covering those topics.

Responsibilities

The Risk and Safety Office (RSO) is the program coordinator and has overall responsibility for the program and its training. The Risk and Safety Office will update the policy and Hazard Assessments yearly or as needed and all will be placed on the Extranet under Safety.

All supervisors/managers are responsible for monitoring employee use of PPE.

This Agency believes it is our obligation to provide a hazard free environment to our employees. Any employee encountering hazardous conditions must be protected against the potential hazards. The purpose of personal protective clothing and equipment (PPE) is to shield or isolate individuals from chemical, physical, or other hazards that may be present in the workplace. Each employee is responsible and is required to wear/use their PPE when indicated on their Job Description Hazard Assessment and at any time, there is a hazard present that indicates a need for protective equipment.

General Policy

Engineering controls shall be the primary methods used to eliminate or minimize hazard exposure in the workplace. When such controls are not practical or applicable, personal protective equipment shall be employed to reduce or eliminate personnel exposure to hazards. Personal protective equipment (PPE) will be provided, used, and maintained when it has been determined that its use is required and that such use will lessen the likelihood of occupational injuries and/or illnesses.

Hazard Assessment

Risk and Safety will perform a yearly assessment of the workplace to determine if hazards are present, or likely to be present, which necessitate the use of personal protective equipment (PPE). This assessment will consist of a survey of the workplace to identify sources of hazards to workers. Consideration will be given to hazards such as impact, penetration, laceration, compression (dropping heavy objects on foot, roll-over, etc.), chemical exposures, harmful dust, heat, light (optical) radiation, electrical hazards, noise, etc. These Hazard Assessments are located on the agencies Extranet.

Where such hazards are present, or likely to be present, the agency will:

- Select and have each affected employee use the proper PPE
- Communicate selection decisions to each affected employee
- Select PPE that properly fits each affected employee
- Train employees in the use and care of PPE

Sources

During the walk-through survey, the Risk and Safety Office (RSO) should observe:

- Sources of motion; i.e., machinery or processes where any movement of tools, machine elements or particles could exist, or movement of personnel that could result in collision with stationary objects
- Sources of high temperatures that could result in burns, eye injury or ignition of protective equipment, etc.
- Types of chemical exposures
- Sources of light radiation, i.e., welding, brazing, cutting, furnaces, heat treating, high intensity lights, etc.
- Sources of falling objects or potential for dropping objects
- Sources of sharp objects which might pierce the feet or cut the hands
- Sources of rolling or pinching objects which could crush the feet
- Layout of workplace and location of co-workers
- Any electrical hazards
 - In addition, injury/accident data will be reviewed to help identify problem areas.

Controlling Hazards

PPE devices alone should not be relied on to provide protection against hazards but should be used in conjunction with guards, engineering controls and sound manufacturing practices.

Assessment and Selection

It is necessary to consider certain general guidelines for assessing the foot, head, eye and face, and hand hazard situations that exist in an occupational or educational operation or process, and to match the protective devices to the particular hazard. It should be the responsibility of The Agency to exercise appropriate expertise to accomplish these tasks.

Personal protective equipment identified and used will meet or exceed any federal or state requirements.

Selection Guidelines

When hazards are present or likely to be present, PPE will be selected for each affected employee. The general procedure for selection of protective equipment is to:

- Become familiar with the potential hazards and the type of protective equipment that is available, and its limitations; i.e., splash protection, impact protection, etc.
- Compare the hazards associated with the environment; i.e., impact velocities, masses, projectile, and sharps, with the capabilities of the available protective equipment
- Select the protective equipment which ensures a level of protection greater than the minimum required to protect employees from the hazards
- Fit the user with the protective device and give instructions on care and use of the PPE. It is very important that employees be aware of all warning labels for and limitations of their PPE.

Fitting the Device

Careful consideration must be given to both comfort and fit. PPE that fits poorly will not afford the necessary protection. Continued wearing of the device is more likely if it fits the wearer comfortably. Protective devices are generally available in a variety of sizes. Care should be taken to ensure that the right size is selected and employees are properly fitted to the PPE they are required to wear. In addition, they will be trained in proper donning, doffing, cleaning, and maintenance.

Devices with Adjustable Features

Adjustments should be made on an individual basis for a comfortable fit that will maintain the protective device in the proper position. Particular care should be taken in fitting devices for eye protection against dust and chemical splash to ensure that the devices are sealed to the face. In addition, proper fitting of helmets is important to ensure that it will not fall off during work operations. In some cases, a chinstrap may be necessary to keep the helmet on an employee's head. (Chinstraps should break at a reasonably low force to prevent a strangulation hazard). Where manufacturer's instructions are available, they should be followed carefully.

Employee-Owned PPE

The Agency is responsible for assuring the adequacy, maintenance and sanitation of employee-owned personal protective equipment. All employee-owned PPE must be approved for wear by the RSO prior to its use.

Reassessment of Hazards

It is the responsibility of the RSO and department leaders to reassess the workplace hazard situation as necessary, by identifying and evaluating new equipment and processes, reviewing accident records, and reevaluating the suitability of previously selected PPE.

Training

Each employee who is required to use PPE will be trained in the following:

- Why PPE is necessary
- When PPE is necessary
- What PPE is necessary and any alternative choices of equipment
- How to properly don, doff, adjust and wear PPE
- Limitations of PPE
- The proper care, maintenance, storage, useful life and disposal of PPE

The training will include an opportunity for employees to handle the PPE and demonstrate that they understand the training and have the ability to use the PPE properly. Training will be provided by the Risk and Safety office (new hires), Medical Services, and department supervisor's as needed. Training will be documented in writing with the documentation including the names of each employee trained, the date(s) of the training, and the subject matter covered. Employees must demonstrate an understanding of the training and the ability to use the PPE properly before they are allowed to perform work requiring the use of the equipment. Employees are prohibited from performing work without donning appropriate PPE to protect them from the hazards they will encounter in the course of that work.

If the RSO or department supervisor has reason to believe, an employee does not have the understanding or skill required the employee must be retrained. Circumstances where retraining may be required include changes in the workplace or changes in the types of PPE to be used, which would

render previous training obsolete. In addition, inadequacies in an affected employee's knowledge or use of the assigned PPE, which indicates that the employee has not retained the necessary understanding or skills, would require retraining.

Cleaning and Maintenance

It is important that all PPE be kept clean and properly maintained by the employee to whom it is assigned. Cleaning is particularly important for eye and face protection where dirty or fogged lenses could impair vision. PPE is to be inspected, cleaned, and maintained by employees at regular intervals as part of their normal job duties so that the PPE provides the requisite protection. Supervisors are responsible for ensuring compliance with cleaning responsibilities by employees. Employees shall never use PPE that is in disrepair or not able to perform its intended function. Contaminated PPE that cannot be decontaminated will be disposed of in a manner that protects employees from exposure to hazards.

Equipment Specifications and Requirements

All personal protective clothing and equipment will be of safe design and construction for the work to be performed. Only those items of protective clothing and equipment that meet standards will be procured or accepted for use.

Eye and Face Protection

The majority of occupational eye injuries can be prevented by the use of suitable/approved safety spectacles, goggles, or shields. Approved eye and face protection shall be worn when there is a reasonable possibility of personal injury. Supervisors, with assistance from the RSO, determine jobs and work areas that require eye protection and the type of eye and face protection that will be used.

Typical hazards that can cause eye and face injury are:

- Splashes of toxic or corrosive chemicals, hot liquids, and molten metals
- Flying objects, such as chips of wood, metal, and stone dust
- Fumes, gases, and mists of toxic or corrosive chemicals
- Aerosols of biological substances

Prevention of eye accidents requires that all persons who may be in eye hazard areas wear protective eyewear. This includes employees, visitors, researchers, contractors, or others passing through an identified eye hazardous area. For employees that wear personal glasses, they shall be provided with a suitable eye protector to wear over them.

Eye and face protectors procured, issued to and used by the Agency personnel must conform to the following design and standards:

- Provide adequate protection against the particular hazards for which they are designed
- Fit properly and offer the least possible resistance to movement and cause minimal discomfort while in use
- Be durable
- Be easily cleaned or disinfected for or by the wearer
- Be clearly marked to identify the manufacturer

Persons who require corrective lenses for normal vision, and who are required to wear eye protection, must wear goggles or spectacles of one of the following types:

- Spectacles with protective lenses which provide optical correction
- Goggles that can be worn over spectacles without disturbing the adjustment of the spectacles
- Goggles that incorporate corrective lenses mounted behind the protective lenses



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Description and Use of Eye/Face Protectors

Safety Spectacles: Protective eyeglasses are made with safety frames, tempered glass or plastic lenses, temples and side shields, which provide eye protection from moderate impact and particles encountered in job tasks such as patient care, woodworking, grinding, etc.

Single Lens Goggles: Vinyl framed goggles of soft pliable body design provide adequate eye protection from many hazards. These goggles are available with clear or tinted lenses, perforated, port vented, or non-vented frames. Single lens goggles provide similar protection to spectacles and may be worn in combination with spectacles or corrective lenses to insure protection along with proper vision.

Welders/Chippers Goggles: These goggles are available in rigid and soft frames to accommodate single or two eyepiece lenses. Welder's goggles provide protection from sparking, scaling or splashing metals and harmful light rays. Lenses are impact resistant and are available in graduated shades of filtration. Chippers/grinders goggles provide eye protection from flying particles. The dual protective eyecups house impact resistant clear lenses with individual cover plates.

Face Shields: These normally consist of an adjustable headgear and face shield of tinted/transparent acetate or polycarbonate materials, or wire screen. Face shields are available in various sizes, tensile strength, impact/heat resistance and light ray filtering capacity. Face shields will be used in operations when the entire face needs protection and should be worn to protect eyes and face against flying particles, metal sparks, and chemical/ biological splash.

Welding Shields: These shield assemblies consist of vulcanized fiber or glass fiber body, a ratchet/button type adjustable headgear or cap attachment and a filter and cover plate holder. These shields will be provided to protect workers' eyes and face from infrared or radiant light burns, flying sparks, metal spatter and slag chips encountered during welding, brazing, soldering, resistance welding, bare or shielded electric arc welding and oxyacetylene welding and cutting operations.

*Personnel requiring prescription safety glasses must contact the RSO.

Emergency Eyewash Facilities

Emergency eyewash facilities are provided in all areas identified as high-risk areas. All are located where they are easily accessible to those in need, i.e., the bay ready line, fueling station, and outlying post.

Respiratory Protection

Respiratory hazards may occur through exposure to harmful dusts, fogs, fumes, mists, gases, smoke, sprays, and vapors. The best means of protecting personnel is with engineering controls, e.g., local exhaust ventilation. Only when engineering controls are not practical or applicable shall respiratory protection be employed to reduce personnel exposure. The RSO is responsible for the Respiratory Protection Program. Employees requiring the use of respirators must first obtain medical approval from the Agency Occupational Health Nurse or chosen physician to wear a respirator before a respirator can be issued. The RSO conducts respirator training and is responsible for determining the proper type of respiratory protection required for the particular hazard. Fit tests will be performed by the RSO every year.

Adherence to the following guidelines will help ensure the proper and safe use of respiratory equipment:

- Wear only the respirator type you have been instructed to use



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- Check the respirator for a good fit before each use and do not use a defective respirator
- Practice moving and working while wearing the respirator so that you can get used to it
- Store respirators carefully in a protected location away from excessive heat, light, and chemicals

Head Protection

Head protection (Helmet) is to be used by employees engaged in patient care. The use of head protection is expected at any scene where there is an identified hazard. Head protection will also be required to be worn by departments that do not provide patient care when/if needed.

Hand Protection

Skin contact is a potential source of exposure to biohazard and toxic materials; it is important that the proper steps be taken to prevent such contact. Gloves should be selected on the basis of the exposure, the particular hazard involved, and their suitability for the operation being conducted. One type of glove will not work in all situations.

Most accidents involving hands and arms can be classified under these main hazard categories: exposures, chemicals, abrasions, cutting, and heat. There are gloves available that can protect employees from any of these individual hazards or any combination thereof.

The first consideration in the selection of gloves for use against chemicals is to determine, if possible, the exact nature of the substances to be encountered. Read instructions and warnings on chemical container labels and SDSs before working with any chemical. Recommended glove types are often listed in the section for personal protective equipment. All glove materials are eventually permeated by chemicals. However, they can be used safely for limited time periods if specific use and glove characteristics (i.e., thickness and permeation rate and time) are known. Gloves should also be worn whenever it is necessary to handle rough or sharp-edged objects, and very hot or very cold materials. The types of glove materials to be used (in these situations) include leather, welder's gloves, aluminum-backed gloves, and other types of insulated glove materials. Careful attention must be given to protecting your hands when working with tools and machinery. Power tools and machinery must have guards installed or incorporated into their design that prevent the hands from contacting the point of operation, power train, or other moving parts.

To protect the hands from injury due to contact with moving parts, it is important to:

- Ensure that guards are always in place and used
- Always lock out machines or tools and disconnect the power before making repairs
- Treat a machine without a guard as inoperative
- Do not wear gloves around moving machinery, such as drill presses, mills, lathes, and grinders

Safety Shoes

Safety shoes shall be worn in the warehouses, maintenance, fleet, and at all times by the operations staff providing patient care. All safety footwear shall comply with applicable standards and regulations.

All Agency Hazard Assessments can be found on individual job descriptions and on the Agency Extranet. For questions, please contact the Risk and Safety Office.