Chapter 17
Personal Protective Equipment

17.1 Overview

a. TSA's goal is to eliminate hazards at their source or where possible, by a process change, and reduce the use of personal protective equipment (PPE) to a last resort when occupational hazards cannot otherwise be eliminated or controlled.

b. Hazards can be eliminated by substituting a non-hazardous material for a hazardous one; installing barriers to isolate hazards; adding safety features such as guards or controls to equipment; redesigning work processes; or purchasing new equipment.

c. Personal protective equipment is not a substitute for engineering, work practices, and/or administrative controls to protect employees from workplace hazards. However, when hazards cannot be removed or adequately controlled, PPE can be used to allow a process to continue until the hazards can be eliminated by other, more effective methods.

d. TSA is responsible for the adequacy of employee-provided PPE, including proper maintenance and sanitation. All PPE must comply with the standards of the Occupational Safety and Health Administration (OSHA), the American National Standards Institute (ANSI), the National Institute for Occupational Safety and Health (NIOSH), or other recognized authorities.

17.2 Authorities and References

a. TSA MD 2400.2, Occupational Safety and Health Program—Organization
b. 29 CFR 1910 Subpart I, Personal Protective Equipment
c. TSA Screening Management Standard Operating Procedures
d. TSA Screening Checkpoint Standard Operating Procedures
e. TSA Checked Baggage Screening Standard Operating Procedures

17.3 Objective

a. Define the basis for the TSA PPE program

17.4 Guiding Principles

a. The TSA PPE program ensures employees are provided with and use PPE to protect themselves from recognized hazards in accordance with authorities 17.2a. through 17.2e above.

b. The Collateral Duty Safety Officer (CDSO) works closely with TSA Occupational Safety, Health, and Environment (OSHE) and its designated representatives to ensure that PPE protocols and equipment continuously meet operational requirements.
17.5 Responsibilities

a. TSA OSHE will:
   (1) Conduct an assessment and include guidance on the use of PPE to field units as part of its job hazard analysis, incident investigation, and workplace inspections programs

b. The Designated Occupational Safety and Health Officer (DOSHO) will:
   (1) Implement this program and ensure accountability for meeting program requirements
   (2) Provide adequate staffing and resources to implement the program
   (3) Ensure that TSA employees receive effective training on the use, care, maintenance, and limitations of the PPE they are required to use
   (4) Ensure qualified occupational safety and health personnel conduct a baseline survey of all work operations to determine PPE requirements
   (5) Ensure PPE is safely stored, maintained, and removed from service when defects are noted

c. The CDSO will:
   (1) Serve as a technical resource for TSA employees on PPE use and limitations
   (2) Provide or arrange for required training in PPE for all employees who use PPE, and prepare and maintain a record of that training
   (3) Conduct baseline and periodic PPE inspections and prepare records of the inspection activities

d. All TSA employees will:
   (1) Use TSA approved PPE when required by this chapter or by TSA directives, standard operating procedures, or guidance documents
   (2) Carefully inspect PPE prior to each use
   (3) Turn in PPE for replacement when defects are noted

17.6 Definitions
See the Glossary at the end of this manual.

17.7 General Requirements

a. Approved PPE. PPE approved for TSA employees includes, but is not limited to:
   (1) Hearing protection (ear plugs and muffls)
   (2) Respiratory protection (applies only to voluntary use of filtering facepiece (dust mask) respirators)
   (3) Hand protection (gloves)
   (4) Eye and face protection (safety glasses, goggles, and shields)
   (5) Head Protection (bump caps)
b. **Hearing Conservation.** Exposure to high noise levels can cause hearing loss or impairment, and create physical and psychological stress. Because there is no cure for noise-induced hearing loss, prevention of excessive noise exposure is the only way to avoid hearing damage. Specifically designed protection may be required, depending on the type of noise encountered and the auditory condition of affected employees.

(1) Voluntary use of hearing protection devices may be allowed by the DOSHO, who will approve and issue all hearing protection devices used by TSA employees. If voluntary hearing protection devices are allowed, proper instruction on the use, care, and maintenance will be provided.

(2) If TSA employees must enter posted noise hazardous areas, they will be provided with and wear hearing protection consistent with posted requirements.

(3) When employees are exposed to sound pressure levels exceeding those listed in Table 17-1, feasible administrative or engineering controls will be used. If such controls fail to reduce sound pressure levels below those in Table 17-1, employees will use hearing protection devices provided by TSA.

**Table 17-1. Permissible Noise Exposures**

<table>
<thead>
<tr>
<th>Duration Per Day, Hours</th>
<th>Sound Pressure Level dBA Slow Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>90</td>
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<tr>
<td>6</td>
<td>92</td>
</tr>
<tr>
<td>4</td>
<td>95</td>
</tr>
<tr>
<td>3</td>
<td>97</td>
</tr>
<tr>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>1.5</td>
<td>102</td>
</tr>
<tr>
<td>1</td>
<td>105</td>
</tr>
<tr>
<td>0.5</td>
<td>110</td>
</tr>
<tr>
<td>0.25 or less</td>
<td>115</td>
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</tbody>
</table>

(4) The recommended method for noise control is engineering enclosures and partitions. Questions regarding noise control should be directed to TSA OSHE.
c. **Respiratory Protection.** Work activities, such as construction and renovation, can create harmful dusts, fumes, mists, or vapors in or near TSA work areas. TSA will work with the Airport Authority or building management to have the employer creating the hazard eliminate or control the source of the exposure to a level that is safe for TSA employees without use of respiratory protective equipment. No TSA employee shall be issued or required to wear respiratory protection until the need for such protection is validated by TSA OSHE and the affected employee has met the criteria set forth by OSHA to include medical evaluation, medical clearance, and fit testing. **Exception:** This does not apply to the voluntary use of filtering facepieces (dust masks).

1. **Voluntary Use Respiratory Protection.**
   
   i. Where respiratory protection is not required, TSA employees may, on a case-by-case basis, wear filtering facepiece respirators (dust masks) for non-hazardous conditions such as nuisance dust. TSA OSHE shall be contacted prior to approving the use of any filtering facepiece respirator. If TSA OSHE determines that voluntary respirator use is permissible, employees approved to voluntarily use respirators shall read Appendix D of 29 CFR 1910.134, *Respiratory Protection,* prior to its use.

   ii. The voluntary use of respirators in atmospheres determined to be non-hazardous does not require the individual to be medically cleared, the facepiece to be fit tested, or the wearer to maintain a tight fit. Persons with beards that could interfere with the faceseal or effective functioning of the filtering facepiece are not prohibited by OSHA from wearing respirators in non-hazardous atmospheres. In addition, if an occupational safety and health professional permits the voluntary use of respirators in the workplace where airborne contaminants have been determined to be below OSHA Permissible Exposure Levels (PELs) or other recognized exposure limits, respirator use is considered voluntary.

2. Respirators are a last resort in protecting employees from potentially harmful environments. Engineering controls, such as enclosures, general and local ventilation, and substitution of less toxic materials, will be implemented before relying on respirators to protect employees.

3. When respirators are required or allowed, only respiratory equipment approved by the NIOSH will be used.

4. When a TSA employee is issued and uses respiratory equipment (other than voluntary use of filtering facepieces (dust masks) as described in 17.7c(1) and (2) above), a respiratory protection program must be developed and approved by TSA OSHE. The program will include at a minimum requirements for:
   
   i. Instruction and training in the need, use, sanitary care, and limitation of the device
   
   ii. Inspection requirements before each use
   
   iii. Proper donning to ensure facepiece seal
iv. Medical evaluation and clearance

v. Fit testing requirements

d. **Hand Protection.** TSA issued and approved alternative gloves are required when engaging in passenger pat-down inspections; during forcible openings of checked baggage and physical inspections of passenger property including Explosive Trace Detector (ETD) operations and physical searches of accessible property; or anytime footwear is handled.

1. Employees who develop contact dermatitis, heat rash, or other skin reactions to TSA issued or approved alternative gloves should use cotton glove liners inside TSA gloves as the first course of action. Should cotton glove liners fail to remedy the problem, an approved barrier cream should be used with and without cotton glove liners. For guidance on additional alternative glove options, contact TSA OSHE.

2. Employees should frequently wash and dry cotton glove liners.

e. **Eye and Face Protection.** Transportation Security Officers (TSO) forcibly opening or assisting in the forcible opening of locked baggage are required to wear safety glasses with permanently attached side shields, safety goggles, or face shields.

1. TSA will provide and ensure employees use appropriate eye protection when required. PPE will be kept clean and in good repair. The use of any equipment with structural or optical defects is prohibited.

2. Safety glasses or goggles will meet ANSI-Z87.1-2003, *American National Standard for Eye and Face Protection*. People who wear prescription eye wear will wear safety goggles. Safety glasses or goggles will be worn with contact lenses.

f. **Head Protection.**

1. Hard Hats.

i. Hard hats are designed to be worn in areas where there is a potential for injury to the head from impact, flying or falling objects (for example working below other workers who are using tools and materials which could fall through grates), or electrical shock and burns.

ii. TSA will work with the Airport Authority and building management to ensure that TSA employees are protected from impact by flying or falling objects to prevent the requirement for hard hats.

2. Bump Caps.

i. TSA employees may be exposed to minor scrapes and bump hazards when accessing baggage screening systems to perform daily image quality tests (IQT). Equipment such as low conveyor systems, piping, or structural beams where employees must pass underneath, should be padded and warning signs posted. If this is not feasible, TSA employees accessing these areas should be issued bump caps.
ii. Bump caps do not prevent impact from falling or flying objects and do not meet the requirements of American National Standards Institute Z89.1-2003, Industrial Head Protection.

g. Foot Protection. TSA OSHE has determined that safety-toed footwear is not required by TSOs involved in passenger and baggage screening operations and activities.

17.8 Training

a. The CDSO will coordinate with the training coordinator to ensure that all affected employees receive training required by this chapter.

b. Training will include a review of this chapter and other training as needed to ensure employees understand correct use and storage of assigned PPE, at a minimum.