

Safety Strategies for the Graphic Arts Industry

"The Personal Protective Equipment Standard Affects Printers "

OSHA's general industry standard on personal protective equipment (PPE) includes provisions that apply to all forms of PPE, as well as several others that involve the design, selection, and use requirements for specific types of PPE, including: eye, face, head, foot, and hand. Respiratory protection and electrical protective devices are the subjects of separate standards. The overall intent of the PPE standard is to encourage the use of new technology, and generally makes the standard "more performance oriented" where appropriate.



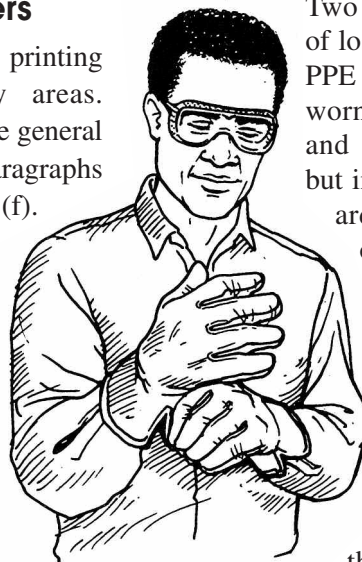
Application to Printers

These changes affect the printing industry in several key areas. In subpart I of 1910.132, the general requirements, three new paragraphs were added: (d), (e), and (f).

The paragraphs apply to equipment selection, defective and damaged equipment, and training. A new section, 1910.138, was specifically added to address hazards and PPE affecting the hands and fingers.

Hand and Finger Injuries

Hand and finger injuries are of particular interest to the printing industry since they account for nearly half of the total number of injuries and a solid 25% of the workers compensation costs. Nearly a third of all permanently disabling injuries involve hands and fingers. OSHA's analysis of injury data and technical loss reports involving hand injuries demonstrated that losses were occurring to people wearing PPE as well as to those who were not. This indicated that problems existed not only with the equipment, but also with the standard. The study examined those incidents where PPE was available, but the loss still occurred.



Two major categories of loss causes emerged: PPE available but not worn—nearly 70%, and equipment worn but inadequate for hazard, was damaged or fit improperly—30%. Similar numbers emerged for injuries to the face, head, feet, and eyes, all of which helped prompt and shape this standard with respect to equipment selection, elimination of damaged or defective PPE, and training.

General Provisions

Selection - OSHA has determined that employers and employees needed additional guidance regarding the selection of PPE than was provided in the older standard. The new paragraphs address this concern. What is important to remember is that the new performance-based standard clearly emphasizes the employer's responsibility for compliance with these provisions. Employers must ensure that all forms of PPE comply with appropriate ANSI standards. They must assess their workplace hazards and select appropriate PPE. In those instances where employees obtain

(over)



their own PPE, the employer must still inform them of the selection criteria that will guide their decision. Employers are responsible for the quality of the hazard assessment and the adequacy of the PPE selected.

Employers are also specifically responsible for the proper fit of the PPE. OSHA's loss analysis identifies fit as a dominant factor in the "equipment available, but not used" category. It also indicated that while fit is important for men and women, women tended to be shortchanged in this area since most PPE is sized for men. This was especially true for foot and hand injuries where women encountered situations where no equipment was available at their workplace in their sizes. As a result, many "made do" with small and medium men's sizes. This created situations where the equipment became too uncomfortable to wear, and, as a result, was not used. In other cases, the poor fit created a loss exposure that caused or contributed to the loss.

Defective and Damaged Equipment - Employers, not employees, are ultimately responsible for ensuring that damaged and defective PPE is not used. Making this provision performance oriented means that OSHA does not specify or limit employer activities in the testing and checking of PPE. Employers must do whatever is necessary to insure that the equipment is adequate for the exposure.

Training - Employers are responsible for training their employees with re-

spect to PPE. Details of the training may vary according to the hazard and type of equipment involved (shoes vs. respirators), but OSHA has determined that the minimum should include: (1) when PPE is necessary; (2) what PPE is necessary for each hazard; (3) how to don, doff, adjust, and wear the PPE; (4) limitations of the PPE; and (5) the proper care, maintenance, useful life and proper disposal.

Training is also performance oriented. It must include demonstrable objectives, and include some form of verification of the requisite training. If the training involves a skill, the employee should be required to perform an activity that demonstrates competence in that skill. If the training objective is knowledge,



there should be a test that evaluates understanding. The verification can be in the form of an individual certification record kept in an employees file, as a training file kept by the supervisor. The form or certificate must identify itself as a certificate of training on PPE; contain the employee's name, the date of training, and the name of the person certifying the training.

Training is an on-going responsibility. If changes occur that render the previous training obsolete do to workplace conditions or the types of PPE involved, then additional training must be provided. Should an employee's performance indicate that the understanding and/or skill have not been retained; the employer must take steps to maintain a satisfactory level of proficiency.

The general requirements apply to all recognized forms of PPE from gloves to respirators to steel-toed shoes to eye wear. OSHA estimates there are 50 thousand printing operations in the U.S. employing nearly a million people. With nearly half of them being affected by the provisions of this standard.

To obtain detailed information on PPE and the OSHA standard go to <http://www.osha.gov/SLTC/personalprotectiveequipment/index.html>