

**OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD**

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**AMENDED PETITION DECISION OF THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
(PETITION FILE NO. 481)**

INTRODUCTION

The Occupational Safety and Health Standards Board (Board) received a petition on February 16, 2006, from J. Alan Schumann, Ph.D. (Petitioner). The Petitioner requests the Board to amend Title 8, California Code of Regulations, Section 3400 of the General Industry Safety Orders (GISO), concerning medical services and first-aid.

Labor Code Section 142.2 permits interested persons to propose new or revised standards concerning occupational safety and health, and requires the Board to consider such proposals, and render a decision no later than six months following receipt. Further, as required by Labor Code Section 147, any proposed occupational safety or health standard received by the Board from a source other than the Division must be referred to the Division for evaluation, and the Division has 60 days after receipt to submit a report on the proposal.

SUMMARY

Section 3400, Medical Services and First Aid, subsection (c), states:

“There shall be adequate first-aid materials, approved by the consulting physician, readily available for workmen on every job. Such materials shall be kept in a sanitary and usable condition. A frequent inspection shall be made of all first-aid materials, which shall be replenished as necessary.”

The Petitioner proposes the following options for amending subsection 3400(c):

“There shall be adequate first-aid materials along with instructional materials or instructional devices, approved by the consulting physician, readily available for workmen on every job. ~~Such~~ First-aid materials shall be kept in a sanitary and usable condition. Instructional materials or instructional devices shall be kept in an accessible and usable condition. A frequent inspection shall be made of all first-aid materials along with the instructional materials or instructional devices, which shall be replenished, replaced or restored as necessary.”

Or

“There shall be adequate first-aid materials along with instructional devices, approved by the consulting physician, readily available for workmen on every job. Such materials shall be kept in a sanitary and usable condition. Such devices shall be kept in an accessible and usable condition. A frequent inspection shall be made of all first-aid

materials along with the instructional devices, which shall be replenished, replaced or restored as necessary.”

The Petitioner asserts that the proposed amendment is necessary because without on-the-spot instruction there is a high probability that trained individuals will not remember the steps to treat an industrial injury. The Petitioner states that studies demonstrate laypersons, including highly motivated individuals, do not effectively retain first-aid and cardiopulmonary resuscitation (CPR) skills. The Petitioner additionally states that several manufacturers produce electronic devices that provide real-time verbal instructions to a first-aid/CPR provider. The Petitioner asserts that verbal instructions can be more effective than written instructions because it is easier to perform first-aid/CPR while listening to instructions. The Petitioner further asserts that real-time first-aid/CPR instruction, which is provided either in writing or verbally by an electronic device, will help ensure proper first-aid techniques are rendered in an emergency. The Petitioner does not propose to amend Section 3400(c), which requires that, in the absence of a nearby facility for the treatment of all injured employees, a person or persons shall be adequately trained to render first-aid.

DIVISION’S EVALUATION

The Division’s evaluation report received May 24, 2006, states the Petitioner points out that research since the original adoption of Section 3400 has documented a decline in the ability of trained first-aid providers to recall and act upon the first-aid instructions they have received. The Petitioner cited several medical journal articles related to retention of CPR training.

The Board has already specifically addressed this issue in Construction Safety Orders (CSO), Section 1512 by requiring such materials to be readily available as part of first-aid supplies:

(c) First-Aid Kit.

(1) Every employer working on or furnishing personnel on a construction project, on line crews and on other short duration or transient jobs shall provide at least one first-aid kit in a weatherproof container. The contents of the first-aid kit shall be inspected regularly to ensure that the expended items are promptly replaced. The contents of the first-aid kit shall be arranged to be quickly found and remain sanitary. First-aid dressings shall be sterile in individually sealed packages for each item. The minimum first-aid supplies shall be determined by an employer-authorized, licensed physician or in accordance with the following Table:

Up-to-date `standard' or `advanced' first-aid textbook, manual or equivalent

*To be readily available but not necessarily within the first-aid kit.

In adopting the wording, “Up-to-date ‘standard’ or ‘advanced’ first-aid textbook, manual or equivalent” as part of a list of “minimum first-aid supplies” required on all construction sites, the Board addressed a similar potential problem of construction site first-aid providers forgetting instructions.

While the Division concurs with the intent of the Petitioner's recommendation, language similar to Section 1512 is recommended over the Petitioner's suggested amendments. The first alternative draws a distinction between first-aid instructional materials and other first-aid supplies in contradistinction to Section 1512, which includes such instructional materials in the list of first-aid materials. Such a distinction between terms is not only unnecessary, as Section 1512 demonstrates, but it also creates a problem by leaving the concept of "instructional materials" undefined. The Petitioner's second alternative does not draw a distinction between first-aid instructional materials and other first-aid supplies. Both alternatives also use a new, undefined term "or instructional devices."

In the petition, four commercially available products are mentioned that span a continuum from colored instructional cards on different first-aid topics marketed at less than \$100 to sophisticated interactive handheld computer-like devices at prices ranging from \$279 to \$3900. In an email to the Division, the Petitioner also stated that first-aid flip guides costing as little as \$8 would qualify as instructional devices. The introduction of the concept of the instructional devices is unnecessary. Such devices, as well as all other instructional first-aid materials, such as handbooks, have been accommodated in Section 1512 under the term "first-aid supplies." The language of Section 1512 is adequate to include the devices contemplated by the Petitioner. The Division did not find evidence that high tech instructional devices are superior to more conventional instructional first-aid materials or that one type of instructional material should be favored over any other.

With regard to the Petitioner adding the words, "replaced or restored," following the word "replenished" the Division believes it is unnecessary. These two additional terms are essentially synonyms for the existing term. Therefore, the Division does not see a need to change the term "replenished."

Based on the above rationale, the Division recommends that the Board should grant the petition to the extent of adding language to Section 3400(c) requiring first-aid instructions to be included in an employer's first-aid materials. By adding appropriate language, the Board will make Section 3400 equivalent to its CSO, Section 1512 and thereby ensure that all first-aid providers covered by the General Industry standard will have appropriate resources to revitalize their first-aid knowledge at the moment that knowledge is most needed.

However, instead of either of the language options proposed by the Petitioner, the Division recommends the following revision of Section 3400:

(c) There shall be adequate first-aid materials, approved by the consulting physician, readily available for workmen on every job. Such materials shall include an up-to-date first-aid textbook, manual or equivalent and be kept in a sanitary and usable condition. A frequent inspection shall be made of all first-aid materials, which shall be replenished as necessary.

STAFF'S EVALUATION

The Petitioner proposes Section 3400 be amended to require a first-aid manual or instructional device be readily available in every workplace. Instructional devices are electronic devices that contain memory chips that play pre-recorded instructions regarding basic first-aid, and the steps to take to treat specific injuries or medical conditions. These products are available from several manufacturers. They range from pocket-size devices that provide treatment advice for CPR or a specific injury, to palm-size or larger devices that contain a selection of pre-recorded injury-specific instructions.

The intent of providing the instructional material or device is to provide immediate guidance to the person(s) administering first-aid, especially persons who are not first-aid trained or who cannot remember critical information from the training.

The American Red Cross (ARC) first-aid classes provide first-aid instructional materials for students to take with them and refer to later as necessary. The ARC also publishes *First Aid Fast*, an 88-page compact pocket reference designed for use in emergencies. The price of the ARC publication is five dollars. Other first-aid guides and instructions are also available free at several internet sites such as www.mayoclinic.com. Many commercial first-aid kits also contain various types of instruction guides.

The studies cited by the Petitioner and numerous additional studies reviewed by the 2005 *International Consensus on CPR and Emergency Cardiovascular Care (ECC)* conclude CPR skills retention is poor and retraining is necessary, however, these studies do not address: 1) non-CPR first-aid skills, 2) whether having a first-aid instruction manual or device immediately available improves the outcome of first-aid treatment, or 3) the relative effectiveness of first-aid instructional materials compared to instructional devices.

The National First Aid Science Advisory Board states that the most important determinant of survival from sudden cardiac arrest is the presence of a rescuer who is trained, willing, able, and equipped to act in an emergency. Although the evidence is not conclusive, having a first-aid manual or device readily available could play a key role in determining the outcome of some medical emergencies. From the studies that Board staff reviewed, it is reasonable to infer that some individuals may be more willing and/or able to perform first-aid while following instructions, either because they are not first-aid trained or they have forgotten elements of the training they received.

Construction Safety Orders, Section 1512, Emergency Medical Services, currently provides for first-aid manuals. Section 1512(c)(1) requires first-aid supplies shall be determined by an employer-authorized licensed physician or shall comply with a list of supplies specified in that subsection. That list includes an up-to-date 'standard' or 'advanced' first-aid textbook, manual or equivalent, which shall be readily available but not necessarily within the first-aid kit.

The Petitioner proposes two options for revising Section 3400. One proposal requires employers provide either instructional materials or instructional devices, while the alternative proposal

requires employers provide instructional devices. The latter proposal would not allow employers to provide instructional materials as an option to instructional devices. Board staff concludes there is no compelling evidence that instructional devices are more effective than instructional materials, and recommends that employers be given the option to provide either instructional materials or instructional devices.

The current standard requires that first-aid supplies are approved by the consulting physician. There is evidence in the rulemaking history to support the necessity for this provision with respect to medications. The Petitioner's proposal would require that first-aid instructional materials or devices are also approved by the consulting physician. The Petitioner has not demonstrated that physician approval is necessary for instructional materials or devices.

Board staff recommends the petition be granted and that Board staff work with the Petitioner and the Division and, if necessary, convene an advisory committee to develop proposed text to amend Section 3400 to require that first-aid instructional materials or devices shall be available for use in emergencies. If, in the future, there is an advisory committee convened to consider Petition File No. 483, which proposes amending Sections 1512 and 3400 with respect to first-aid supplies, Board staff recommends that the advisory committee consider the proposed amendments developed in response to this petition and that the Petitioner be invited to participate on the committee.

CONCLUSION AND ORDER

The Occupational Safety and Health Standards Board has considered the petition of J. Alan Schumann, Ph.D., to make recommended changes to Section 3400 of the General Industry Safety Orders, concerning medical services and first-aid. The Board has also considered the recommendations of the Division and Board staff. **The Petition is hereby granted to the extent that an advisory committee be convened to determine if additional instructional material is warranted, and if so, to develop proposed text to amend Section 3400. The Board further determined that the advisory committee be consolidated with Petitions 482 and 483 and limited in scope to the specific issues of these three petitions.**