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To: CSU Presidents

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From: Jackie R. McClain 
Vice Chancellor
Human Resources

Subject: Heat Illness Prevention Regulation

On August 12, 2005, the California Occupational Safety and Health Standards Board voted to adopt an emergency standard (regulation) on heat illness prevention, proposed by the California Division of Occupational Safety of Health (CalOSHA). The new regulation took effect on August 22, 2005. This memorandum is to advise campuses that the emergency regulation is now a permanent regulation, and is currently in effect. The following provides a summary of the regulation, an overview of campus requirements, an outline of required training and available Web resources. Changes from the prior emergency regulation are noted by underlined text.

Summary of New Regulation:

The Heat Illness Prevention regulation, located in §3395 of Title 8 of the California Code of Regulations, is provided in Attachment A. The new regulation applies to all outdoor places of employment when environment risk factors for heat illness are present. The regulation requires all of the following:

1. All employees who work outdoors in the heat and all supervisors who supervise these employees must be trained on the risks and prevention of heat illness, including how to recognize symptoms and respond when they appear.
2. Drinking water must be available to employees who work outdoors in the heat at all times (one quart per hour).
3. Employees must have access to a shaded area to prevent or recover from heat illness symptoms.

Campus Requirements:

Campuses are responsible for all of the following:

1. Assuring that adequate water and shade are available at a job site that is outdoors and in the heat.
2. Identifying all employees who are required to work outdoors where potential heat illness could occur.
3. Identifying supervisors of the employees defined in #2 above.
4. Providing required training to all potentially impacted employees and their supervisors, as summarized below.

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Employee Training Requirements:

Each campus must provide training to all employees who work outdoors in the heat. Training must address all of the following:

- a) Environmental and personal risk factors for heat illness.
- b) Employer procedures for identifying, evaluating, and controlling exposures to the environmental and personal risk factors for heat illness.
- c) Importance of frequent consumption of water, when the work environment is hot and employees are likely to be sweating more than usual.
- d) Importance of acclimatization.
- e) Different types, signs, and symptoms of heat illness.
- f) Importance to employees of immediately reporting symptoms or signs of heat illness.
- g) Employer procedures for responding to symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary.
- h) Employer procedures for contacting emergency medical services, and if necessary, for transporting employees to a point where they can be reached by an emergency medical service provider.
- i) Employer procedures for ensuring that, in the event of an emergency, clear and precise direction to the work site can and will be provided as needed to emergency responders.

Employer Procedures:

Employer procedures outlined above must be in writing and made available to employees and CalOSHA representatives upon request.

Supervisor Training Requirements:

Supervisors who supervise employees who work outdoors in the heat must receive special training. For purposes of this training, supervisor includes any individual with the authority to hire, transfer, suspend, lay off, recall, promote, discharge, assign, reward, or discipline other employees, or the responsibility to direct them, or to adjust their grievances, or effectively to recommend that action, if the exercise of that authority requires the use of independent judgment. It is the responsibility of each campus to determine who meets this definition of supervisor.

Training for the identified supervisors must address all of the following:

1. Information that needs to be provided to employees who work outdoors in the heat, as detailed above in Employee Training Requirements.
2. Procedures that the supervisor needs to follow to implement the new Heat Illness Prevention regulation.
3. Procedures the supervisor needs to follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures.

Heat Illness Prevention Web Resources:

To assist campuses with the mandatory training, the CalOSHA provides comprehensive Web resources at: <http://www.dir.ca.gov/dosh/HeatIllnessInfo.html>.

Questions regarding this memorandum should be directed to Human Resources Administration at (562) 951-4411. This document also is available on the Human Resources Web page at: <http://www.calstate.edu/HRAdm/memos.shtml>.

JRMcc/gc

Attachment

**STANDARDS PRESENTATION
TO
CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD**

Attachment A
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PROPOSED STATE STANDARD,
TITLE 8, CHAPTER 4

§3395. Heat Illness Prevention in Outdoor Places of Employment.

(a) Scope and Application. This section applies to the control of risk of occurrence of heat illness. This section is not intended to exclude the application of other sections of Title 8, including, but not necessarily limited to, sections 1230(a), 1512, 1524, 3203, 3363, 3400, 3439, 3457, 6251, 6512, 6969, 6975, 8420 and 8602(e). This section applies to all outdoor places of employment.

Note No. 1: The measures required here may be integrated into the employer's Injury and Illness Program required by section 3203.

Note No. 2: This standard is enforceable by the Division of Occupational Safety and Health pursuant to Labor Code sections 6308 and 6317 and any other statutes conferring enforcement powers upon the Division. It is a violation of Labor Code sections 6310, 6311, and 6312 to discharge or discriminate in any other manner against employees for exercising their rights under this or any other provision offering occupational safety and health protection to employees.

(b) Definitions.

"Acclimatization" means temporary adaptation of the body to work in the heat that occurs gradually when a person is exposed to it. Acclimatization peaks in most people within four to fourteen days of regular work for at least two hours per day in the heat.

"Heat Illness" means a serious medical condition resulting from the body's inability to cope with a particular heat load, and includes heat cramps, heat exhaustion, heat syncope and heat stroke.

"Environmental risk factors for heat illness" means working conditions that create the possibility that heat illness could occur, including air temperature, relative humidity, radiant heat from the sun and other sources, conductive heat sources such as the ground, air movement, workload severity and duration, protective clothing and personal protective equipment worn by employees.

"Personal risk factors for heat illness" means factors such as an individual's age, degree of acclimatization, health, water consumption, alcohol consumption, caffeine consumption, and use of prescription medications that affect the body's water retention or other physiological responses to heat.

"Preventative recovery period" means a period of time to recover from the heat in order to prevent heat illness.

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“Shade” means blockage of direct sunlight. Canopies, umbrellas and other temporary structures or devices may be used to provide shade. One indicator that blockage is sufficient is when objects do not cast a shadow in the area of blocked sunlight. Shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool. For example, a car sitting in the sun does not provide acceptable shade to a person inside it, unless the car is running with air conditioning.

(c) Provision of Water. Employees shall have access to potable drinking water meeting the requirements of Sections 1524, 3363, and 3457, as applicable. Where it is not plumbed or otherwise continuously supplied, it shall be provided in sufficient quantity at the beginning of the work shift to provide one quart per employee per hour for drinking for the entire shift. Employers may begin the shift with smaller quantities of water if they have effective procedures for replenishment during the shift as needed to allow employees to drink one quart or more per hour. The frequent drinking of water, as described in (e), shall be encouraged.

(d) Access to Shade. Employees suffering from heat illness or believing a preventative recovery period is needed, shall be provided access to an area with shade that is either open to the air or provided with ventilation or cooling for a period of no less than five minutes. Such access to shade shall be permitted at all times. Except for employers in the agriculture industry, cooling measures other than shade (e.g., use of misting machines) may be provided in lieu of shade if the employer can demonstrate that these measures are at least as effective as shade in allowing employees to cool.

(e) Training.

(1) Employee training. Training in the following topics shall be provided to all supervisory and non-supervisory employees.

- (A) The environmental and personal risk factors for heat illness;
- (B) The employer's procedures for complying with the requirements of this standard;
- (C) The importance of frequent consumption of small quantities of water, up to 4 cups per hour, when the work environment is hot and employees are likely to be sweating more than usual in the performance of their duties;
- (D) The importance of acclimatization;
- (E) The different types of heat illness and the common signs and symptoms of heat illness;
- (F) The importance to employees of immediately reporting to the employer, directly or through the employee's supervisor, symptoms or signs of heat illness in themselves, or in co-workers;
- (G) The employer's procedures for responding to symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary;
- (H) The employer's procedures for contacting emergency medical services, and if necessary, for transporting employees to a point where they can be reached by an emergency medical service provider;

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(I) The employer's procedures for ensuring that, in the event of an emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders.

(2) Supervisor training. Prior to assignment to supervision of employees working in the heat, training on the following topics shall be provided:

(A) The information required to be provided by section (e)(1) above.

(B) The procedures the supervisor is to follow to implement the applicable provisions in this section.

(C) The procedures the supervisor is to follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures.

(3) The employer's procedures required by subsections (e)(1)(B), (G), (H), and (I) shall be in writing and shall be made available to employees and to representatives of the Division upon request.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.