

**OCCUPATIONAL HEALTH
CALIFORNIA STATE UNIVERSITY,
FRESNO**

**Report Number 97-19
March 13, 1998**

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ABBREVIATIONS

CCR	California Code of Regulations
CI/CE	Center for Internships/Cooperative Education
CO	Chemical Hygiene Officer
CSU	California State University
DSC	Department Safety Coordinators
EH&S	Environmental Health and Safety
EMMP	Employee Medical Monitoring Program
GISO	General Industrial Safety Orders
IIPP	Injury and Illness Prevention Program
MSDS	Material Safety Data Sheets
RISO	Research and Instructional Safety Office

INTRODUCTION

PURPOSE

Our overall audit objective was to determine the effectiveness of existing policies and procedures that relate to both employee and student health and safety and mitigation of real and potential hazards in the workplace.

Within the overall audit objective, specific goals included determining whether:

- ▶ the campus had developed and distributed a written IIPP to all departments;
- ▶ the campus had developed a satisfactory system for communicating pertinent IIPP and other safety and health information to all affected employees;
- ▶ selected departments had implemented procedures for both scheduled and unscheduled inspections which includes the filing of reports with distribution to appropriate department chairs and the office on environmental health and safety;
- ▶ the campus had implemented procedures for investigation, recording and reporting accidents;
- ▶ the campus had identified training requirements applicable to specific classes of employees and provided adequate training to students whose study areas take them into places where potential workplace hazards are located;
- ▶ the campus had developed procedures and materials to assure that employees and students are provided training in a timely manner;
- ▶ the campus had developed procedures for recording training to employees and students; and
- ▶ the campus had developed a medical monitoring program and identified those employees who should be included.

SCOPE AND METHODOLOGY

This review emphasized but was not limited to compliance with state laws, Board of Trustee policies, and Office of the Chancellor and campus policies, letters and directives. The primary directive for this review involves Title 8, §3203. *Injury and Illness Prevention Program (IIPP) of the California Code of Regulations (CCR)*. In addition, Office of the Chancellor and campus generated manuals were used to measure compliance with selected health and safety issues. January 1996 to date was the primary period of review.

INTRODUCTION

Our focus involved appropriate health and safety related records and procedures within the campus Environmental Health and Safety Office and four departments: Art, Biology, Chemistry and Physical Plant. We selected ten employees from each of the four departments and two spring 1997 classes from each of the three academic departments. We reviewed available records related to health and safety training and information for both the selected employees and students within the selected classes.

Specifically, we reviewed and tested the following areas:

- ▶ development, implementation and communication of the campus IIPP;
- ▶ health and safety inspections;
- ▶ employee health and safety training;
- ▶ student health and safety training; and
- ▶ employee medical monitoring.

BACKGROUND

Senate Bill 198, Injury and Illness Prevention Program (IIPP), was passed and chaptered into the Insurance and Labor Codes on October 2, 1989. Regulations amending the General Industrial Safety Orders (GISO) in the California Code of Regulations were adopted on December 13, 1990 and incorporated in GISO § 3203, Injury and Illness Prevention Program. Beginning July 1, 1991, §3203 required employers to establish, implement, and maintain a written Injury and Illness Prevention Program with specified elements including substantial compliance criteria for use in evaluating an employer's injury prevention program.

The California State University developed and distributed a model Injury and Illness Prevention Program (IIPP) to each campus. This model (IIPP) was designed to serve as an umbrella that incorporates the elements of the myriad of individual health and safety programs required by state and federal law. It has also been designed to integrate existing campus health and safety regulations and future safety-related mandates that may arise.

The intent of the model IIPP was to facilitate: identification and evaluation of workplace hazards; correction of unsafe conditions; communications between the university and its employees, students and the general public on matters concerning health and safety; education and training of employee; development of compliance strategies; documentation/recordkeeping of safety and health related activities; and identification of the person responsible for administering the program.

OPINION

We visited the California State University, Fresno campus from October 20, 1997 through December 12, 1997 and audited the procedures in effect at that time.

We found that, except for the items noted in the Executive Summary and in the details of the report, compliance with state, CSU and campus policies and procedures were satisfactory. The comments that follow are based on an effort to identify and mitigate issues that detract from the overall effectiveness of the existing campus health and safety program.

EXECUTIVE SUMMARY

The purpose of this section is to provide management with an overview of conditions requiring their attention. Areas of review not mentioned in this section were found to be satisfactory. Numbers in brackets [] refer to page numbers in the report.

INJURY AND ILLNESS PREVENTION PROGRAM (IIPP) [5]

The current copy of the campus Injury and Illness Prevention Program (IIPP), dated April 1997, had not been endorsed by the President and distributed to the campus community. Distributing a current IIPP endorsed by the president will increase the level of health and safety awareness among the campus community and reduce the risk of workplace accidents and illnesses.

HEALTH AND SAFETY INSPECTIONS [6]

The campus health and safety inspection process was inadequate with respect to timeliness and documentation of inspections, distribution of inspection reports and documentation on follow-up activities to points raised on previously conducted inspections. Establishing full implementation of existing campus inspection policies and procedures reduces campus exposure to injuries and illnesses, subsequent civil and criminal litigation, and citations/fines by various regulatory agencies.

EMPLOYEE HEALTH AND SAFETY TRAINING [7]

The campus employee health and safety training procedures were inadequate with respect to development of training profiles, timely training of employees and maintenance of training records. Establishing full implementation of training policies and procedures reduces campus exposure to injuries and illnesses, subsequent civil and criminal litigation, and citations/fines by various regulatory agencies.

STUDENT HEALTH AND SAFETY TRAINING [9]

On- and off-campus health and safety training and information policies and procedures for students were inadequate. Establishing a more comprehensive and uniform process of providing students with applicable training and information regarding both on- and off-campus educational activities reduces the risk of both injuries and illnesses to students and subsequent civil litigation.

EMPLOYEE MEDICAL MONITORING [10]

The campus had neither identified all employees who should be included in their Employee Medical Monitoring Program (EMMP) nor provided timely medical monitoring to a number of those currently in the EMMP. Identifying those employees who should be included in the EMMP and assuring they receive appropriate and timely medical monitoring reduces the risk of work-related illnesses going undetected.

ACCIDENT INVESTIGATION AND REPORTING [12]

The campus accident investigation and reporting procedures were not fully implemented. Establishing full implementation of accident investigation and reporting provides greater awareness of such issues and reduces the risk of additional injuries and illnesses and subsequent civil litigation.

OBSERVATIONS, RECOMMENDATIONS, AND CAMPUS RESPONSES

INJURY ILLNESS PREVENTION PROGRAM

The current copy of the campus Injury Illness Prevention Program (IIPP), dated April 1997, had not been approved and endorsed by the President and distributed to the campus community.

In addition, three of four departments visited had not developed their own IIPP. Each department was responsible for developing departmental procedures to ensure effective compliance with the IIPP and other university health and safety policies as they relate to operations under their control.

The CSU Model Injury and Illness Prevention Program (IIPP), among others, addresses the campus's requirements contained in California Code of Regulations (CCR) Title 8, §3203, Injury and Illness Prevention Program. The campus version of the IIPP, titled Injury Illness Prevention Program, addresses specific IIPP requirements in §7. Responsibilities, §9. Communications, and §16. Resources.

The director of EH&S indicated that the IIPP had not been fully implemented due to limited resources. Although the heads of the four departments indicated that they were not aware of the requirements to develop their own IIPP procedures, there was documented communication of responsibilities with the initial distribution of the IIPP. However, further monitoring to ensure compliance with the IIPP had not been documented.

By not distributing a current IIPP endorsed by the president to the campus community, the level of health and safety awareness is diminished and the risk of employee injuries and illnesses is increased.

Recommendation 1

We recommend that the current IIPP be endorsed by the president and distributed to all campus departments for implementation.

Campus Response

We concur. The campus IIPP was endorsed by the President on January 30, 1998. Distribution of the IIPP was completed and implementation began on March 9, 1998

Recommendation 2

We recommend that campus departments be reminded of their responsibility to develop IIPP procedures pertinent to their respective areas.

Campus Response

We concur. The updated IIPP was accompanied by two memorandums, one from the President and one from the Director of Environmental Health and Safety. The memorandums included statements clearly indicating that campus departments were responsible for the development, implementation, and maintenance of IIPP procedures pertinent to their respective areas. The Office of Environmental Health and Safety (EH&S) will follow up with each department in order of risk priority to assure that department IIPP procedures are developed and followed.

HEALTH AND SAFETY INSPECTIONS

The campus health and safety inspection process was inadequate with respect to timeliness and documentation of inspections, distribution of inspection reports and documentation on follow-up activities to points raised on previously conducted inspections.

We found that:

- ▶ Three of the four departments visited had not developed the formal *internal* inspection and hazard control procedures required by §10.0 and §12.0 of the campus IIPP, which would include the frequency, distribution and corrective action procedures for inspections.
- ▶ Formal inspections in two (Art and Plant) of the four departments were not being completed within the intervals recommended by the campus IIPP.
- ▶ Records of departmental inspection results for Chemistry and Biology were not always being provided to EH&S or to applicable health and safety committees. Only four of the ten inspections completed by the departments were received by EH&S.
- ▶ Monthly inspections of eyewashes and safety showers were not being completed. EH&S were completing these annually and every semester by the Chemical Hygiene Officer (CO).
- ▶ Scheduled and unscheduled inspections by EH&S of all work areas to ensure maintenance of a safe and healthful workplace were not occurring.
- ▶ The Campus Health and Safety Committee that provides oversight of the inspection function was not reviewing results of the inspections completed.
- ▶ Laboratories were not being inspected at least quarterly by the Principal Investigator and documented as required by the Chemical Hygiene Plan.

The CSU Model Injury and Illness Prevention Program (IIPP), among others, addresses the inspection requirements contained in California Code of Regulations (CCR) title 8, § 3203, Injury and Illness Prevention Program. The campus version of the IIPP titled Injury Illness Prevention Program addresses specific inspection requirements in §10. Environmental Health and Safety Inspections, §12. Hazard

Control Procedures, and §16. Resources. The Chemical Hygiene Plan address inspections in §7. Responsibilities.

The director of EH&S indicated that the reason for the inadequate inspections was due to limited resources within EH&S. Although the department chairs indicated that the requirements of individual area inspections were not communicated, there was documented communication of responsibilities with the initial distribution of the IIPP. However, further monitoring to ensure compliance with the IIPP had not been documented.

By not assuring full implementation of inspection procedures, the campus is exposed to an increased risk of injuries and illnesses, subsequent civil and criminal litigation and citations/fines by various regulatory agencies.

Recommendation 3

We recommend that the campus review and strengthen their existing health and safety inspection procedures related to number and frequency of inspections, inspection report distribution and follow-up activities to correct previously identified deficiencies.

Campus Response

We concur. The inspection requirements for all campus departments are clearly detailed in the updated and recently distributed campus IIPP. EH&S is available for consultation to provide departments with assistance in the development of effective IIPP procedures, including those related to inspections. Model departmental IIPP from other campuses, if available, will be obtained and distributed as needed.

The addition of two experienced safety professionals to the staff of EH&S has greatly improved the department's inspection capability, both as to the number and frequency of inspections. The documentation of inspections and subsequent corrective action, and the distribution of inspection reports, will be improved with the development of an inspection/complaint response form. Use of the form during inspections will provide EH&S an opportunity to detail all pertinent information, and document that identified deficiencies have either been corrected or prioritized for future correction. A web-site based "Hazardous Condition Report" is also under development, and will be utilized to augment the recognition of safety hazards that may not be revealed in formal and informal inspections. Both the inspection/complaint response form and the web-site based report are targeted for implementation by July 1, 1998.

EMPLOYEE HEALTH AND SAFETY TRAINING

The campus employee health and safety training procedures were inadequate with respect to development of training profiles, timely training of employees and maintenance of training records.

We found that:

- ▶ Three (Art, Biology, and Facilities) of the four departments visited had not fully implemented campus IIPP training policies and procedures.
- ▶ The campus had not developed formal training profiles for each of its employees. Employee training profiles provide greater assurance that each employee will receive required training.
- ▶ Not all employees were receiving required health and safety training. Twenty-six of the forty employees selected for review had not received any health and safety training.
- ▶ There was no documented evidence that new employees were required to work with senior level employees or receive general and specific safety training prior to being released to a new job assignment.
- ▶ There was no documented evidence that employees received necessary training and information whenever new hazardous substances, processes, procedures or equipment were introduced to the workplace, or whenever a previously unrecognized hazard was discovered.
- ▶ Procedures were not in place to assure that each employee who missed scheduled training sessions were rescheduled for subsequent training.
- ▶ Faculty and staff employees were not receiving any health and safety information as part of new employee orientation.
- ▶ Oversight of employee health and safety training was not adequate. There was no record of the campus health and safety committee reviewing training issues. In addition, EH&S was not involved in any formalized monitoring to ensure training and related documentation was complete.

The CSU Model Injury and Illness Prevention Program (IIPP), among others, addresses the training requirements contained in California Code of Regulations (CCR) Title 8, §3203, Injury and Illness Prevention Program. The campus version of the IIPP, titled *Injury Illness Prevention Program*, addresses specific training requirements in §13. Employee Safety Training.

The director of EH&S indicated that the reason for the inadequate training was due to limited resources within EH&S. Although the department heads indicated that the requirements of departmental training were not communicated, there was documented communication of responsibilities with the initial distribution of the IIPP. However, further monitoring to ensure compliance with the IIPP had not been documented.

By not assuring full implementation of training procedures, the campus is exposed to an increased risk of injuries and illnesses, workers compensation claims, subsequent civil and criminal litigation and citations/fines by various regulatory agencies.

Recommendation 4

We recommend that the campus strengthen their existing health and safety training procedures to assure appropriate and timely training of all employees.

Campus Response

We concur. EH&S will assist all campus departments with the implementation of health and safety training procedures by providing Supervisor Safety Training to all campus deans, department heads, and directors. The training will provide the knowledge and tools needed to develop and implement a departmental IIPP. Departments will then be expected to determine the training requirements for the various job classifications of their employees, ensure the completion of training, and maintain training records. EH&S will be available for consultation in determining employee training needs, developing training materials, and will provide training if necessary. Supervisor Safety Training will be provided to departments in order of risk priority will full completion of initial training targeted for July 1, 1999. Training of supervisors in high hazard areas will be completed by July 1, 1998.

General safety orientation programs are under development for all current employees and for new employees. EH&S is reviewing the possibility of utilizing CD-ROM based safety training for the safety topics that must be covered. However, purchase of the needed programs will be dependent upon available resources.

Environmental Health & Safety Directors throughout the CSU system have recognized that the full implementation of health and safety training procedures for all campus employees has been and continues to be hampered by inadequate resources. A committee has been established to develop a proposal for a training grant that would benefit all CSU campuses. Successful acquisition of grant monies would assist in expediting full implementation of the health and safety training procedures.

STUDENT HEALTH AND SAFETY TRAINING

On- and off-campus health and safety training and information policies and procedures for students were inadequate.

We found that:

- ▶ Two of the three academic departments visited (Art and Biology) had not developed any student health and safety policy for classroom or lab activities. In addition, four of the six classes reviewed had no documented evidence of having provided any health and safety information to students.
- ▶ Four of the six classes reviewed did not require students to certify having received health and safety instructions in the classroom and laboratories.
- ▶ Material Safety Data Sheets (MSDS) used for all four departments reviewed were not always readily accessible to students and *employees* working in laboratories and other campus facilities.
- ▶ Neither the campus nor the three academic departments reviewed had developed policies and procedures for off-campus activities such as internships and field trips.

- ▶ There was no oversight to ensure that students were receiving health and safety training. Specific student health and safety issues were not a topic of discussion at the health & safety committee and there was no evidence of any other campus entity monitoring this issue.

Because there is no comprehensive and uniform state, CSU, and campus policy regarding on-campus student health and safety training and information, we found that schools and departments were developing and implementing their own individual student health and safety related training and information, thus leading to varying degrees of coverage.

By not establishing a more comprehensive and uniform process of providing students with applicable training and information regarding both on- and off-campus educational activities, there is an increased risk of both injuries and illnesses to students and subsequent civil litigation.

Recommendation 5

We recommend that the campus establish and currently maintain a more comprehensive program that addresses health and safety training and information, including liability issues, related to both on- and off-campus student activities.

Campus Response

We concur. Student training requirements are clearly detailed in the recently distributed campus IIPP, and additional uniform information on meeting the requirements will be provided in the upcoming Supervisor Safety Training.

Field trip and special event procedures will be provided to each department and student organization. Draft procedures will be completed by June 1, 1998. Interim procedures are in use by EH&S until then, coordinated by the University's new Risk Management Coordinator.

EMPLOYEE MEDICAL MONITORING

The campus had neither identified all employees who should be included in their Employee Medical Monitoring Program (EMMP) nor provided timely medical monitoring to a number of those currently in the EMMP.

We found that:

- ▶ The campus medical monitoring program (EMMP) included only a few faculty members among the 140 employees on the list of individuals requiring medical monitoring. Most faculty were not included in the EMMP, even though their exposure to hazardous materials was similar to those laboratory technicians who were included in the program.
- ▶ The current list of employees included in the EMMP was in need of re-evaluation. The list included a number of employees whose need for medical monitoring was questionable, while other employees who were more likely to require medical monitoring were not listed.

- ▶ Four of the ten employees reviewed were not provided a baseline examination when they were included in the EMMP.
- ▶ Three of the ten employees in our review had not received consistent follow-up examinations since their inclusion in the program, and two other employees had not received any follow-up examinations.

Specific employee medical monitoring program requirements are contained within the CSU Sample Employee Medical Monitoring Program (EMMP) Manual and the CSUF Employee Medical Monitoring Program. Both the CSU and campus EMMP documents require a baseline physical examination of applicable employees before being assigned to work with respirators or in areas containing potentially hazardous or OSHA regulated substances. Subsequent periodic examinations for these employees are required and the frequency depends upon that required by the physician or pertinent regulation.

Section 2.2 of the CSU EMMP Manual contains the following information regarding faculty:

. . . In general, faculty members have minimal contact with hazardous agents or chemicals, and minimal potential for exposure. Faculty members from the following departments may have potential for a significant biological, physical, or radiological exposure: Chemistry, Biological Sciences, Art, Industrial Arts, Chemical Engineering, Ornamental Horticulture and Plant and Soil Science.

Office of the Chancellor Memorandum HR 96-04, April 8, 1996, *Policy on Mandatory Medical Examinations – Personnel Actions for Failure to Employee to Comply* states, in part:

It is the policy of the CSU that medical examinations mandated by federal and state laws and regulations are strictly enforced by each campus. Failure or refusal of an employee to undergo required medical testing as determined by campus management shall constitute a failure or refusal to perform the normal and reasonable duties of the position.

The director of EH&S indicated that the reasons for the inadequate EMMP procedures was due to limited resources in EH&S, and that such resources were needed to provide the necessary oversight for medical monitoring. In addition, the director of health and psychological services indicated that there had been some confusion as to who was responsible for the implementation of the EMMP.

Failure to identify those employees who should be included in the EMMP and assuring that they receive appropriate and timely medical monitoring increases the risk of work related illnesses going undetected.

Recommendation 6

We recommend that the campus:

- a. provide training to department representatives regarding full implementation of the EMMP;
- b. identify and include all appropriate employees in the EMMP; and
- c. assure that all employees in the EMMP are provided with appropriate and timely medical monitoring requirements.

Campus Response

We concur. The EH&S Environmental Quality Coordinator is designated as the responsible party for the implementation and coordination of the campus EMMP.

Training will be provided to all campus supervisors to assist them in determining that all appropriate employees within their department are provided with medical monitoring as specified in the California Code of Regulations. Guidelines in identifying appropriate employees will be provided. Training will be provided to departments in order of risk priority with full completion of initial training targeted for July 1, 1999. Training in high hazard areas will be completed by July 1, 1998.

ACCIDENT INVESTIGATION AND REPORTING

The campus accident investigation and reporting procedures were not fully implemented. The areas where improvements were needed included the distribution of reports and the maintenance of departmental and campus-wide occupational illness and injury records.

We found that:

- ▶ The campus was not maintaining a master log and summary of occupational injuries and illnesses. The list used is obtained from the State Compensation Insurance Fund Office.
- ▶ The three academic departments visited were not maintaining departmental injury logs.
- ▶ Not all accidents occurring on campus were being reported to the Occupational Health & Safety committee.

The CSU Model Injury and Illness Prevention Program (IIPP) among others, addresses accident investigation and reporting requirements contained in California Code of Regulations (CCR) title 8, §3203, Injury and Illness Prevention Program. The campus version of the IIPP, titled *Injury Illness Prevention Program*, addresses specific accident investigation requirements in §11, Accident Investigation and §14.1, Campus Accidents, Injuries and Illness Recordkeeping Procedures.

The heads of the departments visited all indicated that they were not aware of the requirement to maintain documentation of departmental accidents. In addition, the director of EH&S indicated that h

- is staff had not been aware of the requirement to report accidents to the health and safety committee.

Failure to establish full implementation of campus IIPP accident investigation and reporting procedures, including remedial corrective actions, reduces overall campus awareness to such issues and increases the risk of additional injuries occurring and subsequent civil litigation.

Recommendation 7

We recommend that the campus strengthen their existing accident investigation and reporting procedures to assure:

- a. timely reporting of accidents to the campus-wide EH&S committee, and
- b. more complete departmental and campus illness and injury recordkeeping.

Campus Response

We concur. Within five days of the occurrence of a qualifying accident or injury involving employees or students a report will be submitted the EH&S and the University Safety Committee.

EH&S staff has been augmented with a Worker's Compensation Specialist and Risk Manager. All campus accidents are now investigated as reported, and all illness and injury records are up to date. The campus IIPP has been updated to delete the requirement that each department maintain an illness and injury log. The update has been distributed to all departments.

APPENDIX A: PERSONNEL CONTACTED

<u>Name</u>	<u>Title</u>
John Welty	President
Larry Anderson	Professor
Bob Barnes	Instructional Support Technician
Robert Boyd	Director of Facilities
Paula Carleton	Health Records Clerk
Lisa Daughtry	Environmental Quality Coordinator
Richard Delaney	Chair, Art Department
John Franz	Director Employee Assistance Program
Tracey Garza	Worker's Compensation Coordinator
Lawrence Haugen	Associate Director University Health & Psychological Services
Diane Jenkins	Benefits Coordinator
Tom Mallory	Chair, Biology Department
David Moll	Director Environmental Health & Safety
Howard Ono	Chair, Chemistry Department
Robert Paull	Associate Vice President, Student Affairs
Jeanne Phillips	Administrative Assistant
Benjamin Quillian	Vice President for Administration
Vida Samiian	Associate Dean School of Arts and Humanities
Bill Schotke	Water Quality Specialist
Rachel Velasquez	Clerical Assistant
Joyce Weber	Chemical Hygiene Officer School of Natural Sciences
Stanley Ziegler	Associate Dean and Professor