# DEPARTMENT OF ENTOMOLOGY
## INJURY & ILLNESS PREVENTION PROGRAM
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I. UC DAVIS/ENTOMOLOGY'S COMMITMENT TO HEALTH AND SAFETY

A. Health and Safety Policy

UC Davis policy requires that all members of the campus community be held accountable for accident prevention. The Entomology Department is firmly committed to maintaining a safe and healthful working environment. To achieve this goal, and to fully comply with Labor Code P6401.7 (SB 198) and General Industry Safety Order P3203, the Department of Entomology has implemented this Injury and Illness Prevention Program.

B. Housekeeping Policy

An integral part of any effective safety program is good housekeeping. Keeping work areas organized and clean and neat reduces the chances of accidents and injuries. This is especially important in laboratories that use hazardous chemicals. Each employee is responsible for keeping his or her area clean. Housekeeping will be a part of all routine and casual inspections.

C. Objective of the Illness & Injury Prevention Program

The purpose of this program is to prevent workplace accidents, injuries and illnesses. It is the intent of the Department that everyone be properly trained and informed, and have the proper equipment available to perform their duties safely and accident-free.

D. Responsibility for Health and Safety

UC Davis policy states that all employees are held accountable for accident prevention and are responsible for working safely and maintaining a safe and healthful work environment.

1. Program Administrator

The Program Administrator is:

Robert E. Page, Jr., Chairperson
Department of Entomology, 367 Briggs Hall
Telephone 752-0492

The Program Administrator is responsible for the overall implementation and maintenance of Entomology's Injury and Illness Prevention Program. The Program Administrator may assign some or all of the tasks of the Injury and Illness Prevention Program to the Department Safety Committee and/or to other individuals within the department.
2. Department Safety Committee/Department Safety Coordinators

The members of the Department Safety Committee for 2002-2003 are:

Ken Lorenzen Research Staff Representative; Chair, Safety Committee
M. Kim Fondrk Research Staff Representative
Shirley Gee Research Staff Representative
Sandy Kelley Research Staff Representative
Janet Brown-Simmons Administrative Staff Representative; Department MSO
Dr. Walter Leal Faculty Representative

The members of the Safety Committee also function as Safety Coordinators for the Department of Entomology. The Safety Coordinators' duties include, but are not limited to:

a. Ensuring that employees are trained in workplace safety and are familiar with the health and safety hazards to which they may be exposed, as well as applicable Safety Orders that may apply to the operation;

b. Reviewing industry and general information (including Material Safety Data Sheets and Chemical Hygiene Plans for chemicals used) on potential occupational safety and health hazards;

c. Scheduling and conducting periodic inspections of general work areas and specific workstations, and inspecting, recognizing and evaluating workplace hazards on a continuing basis;

d. Developing methods for abating workplace hazards and abating such hazards in a timely and effective manner;

e. Evaluating information provided by employees; and

f. Investigating all accidents, injuries, illnesses, and unusual events that have occurred in the department.

3. Principal Investigators

The Principal Investigator [ PI ] is responsible for ensuring that the employees under his or her immediate direction or control are trained in workplace safety and are familiar with the health and safety hazards to which they may be exposed. The PI must ensure that the employees under his or her immediate direction or control are familiar with applicable laws and regulations as well as University safety rules and policies.

4. Instructors of Laboratory Courses

It is the responsibility of the instructor of each laboratory course to carefully review all laboratory experiments for possible health, safety and environmental problems before the
experiments are assigned to students. Any known hazards must be communicated to teaching assistants and protective measures must be employed.
5. Employees

All employees are required to follow established safety procedures and practices in the performance of their duties.

II. HAZARD ASSESSMENT CONTROL

A. Identification of Workplace Hazards

1. Initial Assessment

Initial assessment of workplace hazards is determined through the use of Work Area Hazard Evaluation Forms [Appendix II, Forms IIa and IIb; see Section 2 below]. Workplace hazards in Entomology will be identified by work areas. Individuals working in a specified area will be exposed to basically the same hazards. Some people will be exposed to specific hazards that can be noted on Work Area Hazard Evaluation Forms that list each work area and job titles of employees.

2. Work Area Hazard Evaluation Forms

   a. Principal Investigator Form [Appendix II, Form IIa]: This form will be completed by the PI or the individual in charge of the work area and will cover hazards for the entire group that works in the area.

   b. Employee Form [Appendix II, Form IIb]: This form will be completed by each member in the work group, except the person in charge.

These forms should be kept in a binder in each laboratory with the IIPP document.

3. Periodic Scheduled Inspections

An annual facility inspection will be conducted by the Safety Coordinators or their designates. This will be a walk-through inspection and will be scheduled to be conducted approximately six months after the annual Fire Department Inspection that occurs during Fall Quarter. This inspection will be documented on the Facilities Inspection Report Form [Appendix II, Form IIc]. Records will be kept for three years.

4. Safety Log

Principal Investigators will be routinely conscious of laboratory hazards and must ensure that activities in their laboratories are consistent with all rules for laboratory safety and good research protocol. Principal Investigators are required to maintain a Safety Log [Appendix II, Form I] to record any deficiencies and subsequent corrective actions. The PI will act in a timely manner to have the Safety Committee review the Safety Log after corrective action is taken.

This documentation is very important; it is mandated by law and must be made available upon request by Cal-OSHA. The Safety Log should be kept in a binder with the IIPP document.
It is the stated intent of this policy that any deficiencies be corrected as quickly as possible. The PI will seek advice from the Department Safety Committee if solutions to deficiencies are not readily apparent. The Safety Committee will solicit the advice of EH&S if additional assistance is needed. Unsafe deficiencies in the building will be brought to the attention of Facilities Services.

5. New Matters

The Safety Coordinators will arrange for an inspection whenever new substances, processes, procedures or equipment are introduced that present new occupational safety and health hazards, and whenever the employer is made aware of a new, previously unrecognized hazard [use Form IIa (Appendix II) to report new hazards].

6. Employee Reporting of Hazards

Employees will immediately report any unsafe condition or hazard in the workplace to their supervisor or a Department Safety Coordinator. By law, no employee will be disciplined or discharged for reporting any workplace hazard or unsafe condition.

Employees who wish to remain anonymous may report any unsafe conditions or hazards by submitting Form IIId [Appendix II], without identifying themselves, to a Department Safety Coordinator. Or, employees may identify themselves on the form but may request that their identity be kept confidential.

7. Documentation of Inspections

Inspections will be documented on the Facilities Inspection Report Form [Appendix II, Form IIc], or the Employee Safety Information Form [Appendix II, Form IIId]. These reports will be kept on file for at least three years.

B. Monitoring and Correcting Identified Potential Health and Safety Concerns

1. Identified Health and Safety Concerns

Inspections are conducted to verify compliance with codes of safe practices and other safety requirements to identify any additional hazards and to investigate accidents, injury and illness cases and unusual occurrences. Inspections are scheduled as set forth in Section II, HAZARD ASSESSMENT CONTROL.

2. Newly Discovered Health and Safety Concerns

The inspection process for discovering new health and safety concerns has been set forth in Section II, HAZARD ASSESSMENT CONTROL. The department will respond promptly to employee complaints and suggestions and to newly discovered safety hazards.

3. Hazards That Give Rise to a Risk of Imminent Harm
Whenever possible, it is the department's intent to abate immediately any hazard which gives rise to a risk of imminent harm. When such a hazard exists that cannot be abated
without risk to department personnel, all exposed personnel will be removed from the area of risk. Proper authorities will be immediately summoned. Department personnel will not be allowed back into the area until the area is safe.

III. EMERGENCIES

A. Building Evacuation Plan and Emergency Evacuation Procedures

The Building Evacuation Plan is individualized for each room, including teaching laboratories, under the control of the Entomology Department. The plan clearly shows the evacuation route to be taken by the occupants of each room and is posted in each room of the building. A copy of the Building Evacuation Plan [without the individual room floor plans] is included in Appendix III; also included in Appendix III are floor plans for Briggs Hall, Bee Biology and Storer Hall that can be used to create individualized evacuation maps.

In addition, all employees should familiarize themselves with the following information:

1. Know the quickest exit route out of the building using the nearest exit. Be familiar with alternate exits. Use the stairwells; NEVER USE THE ELEVATORS!

2. Know the location of the nearest manual fire alarm pull station in your building and know how to activate it.

3. Know if co-workers, students or visitors require assistance in exiting the building and be prepared to provide whatever help is necessary. Persons with disability-related evacuation needs are encouraged to discuss their needs with the Safety Coordinator in advance.

4. Know where your Building Assembly area is located and the evacuation route you should follow to reach it. Do not stand in roadways or driveways: emergency responders need clear access to buildings.

5. Know how to turn off any machinery and equipment at your worksite, which if left running for an extended period might create additional safety hazards, eg., coffee makers, Bunsen Burners, etc.

REMEMBER: The building may become damaged event of a severe fire and you may not be allowed to return to gather your personal effects. Quickly grab your jacket, purse, keys, laptop, etc. before evacuating the building.

B. Emergency Procedures

Employees may face various emergency situations while at work [earthquakes, chemical spills, fires, medical emergencies]. Personnel are instructed to review Appendix III and familiarize themselves with the Emergency Procedures for each of these situations.

IN ANY EMERGENCY, CALL 9-1-1 TO REQUEST ASSISTANCE.
IV. UC DAVIS SAFETY RULES

Guidelines for UCD's written hazardous substances communication program are contained in Section 290-97 of the Policy and Procedure Manual. Laboratories using hazardous chemicals must have Chemical Hygiene Plans that state both generic and specific rules and procedures for safe laboratory conduct. The format for this plan is found in Appendix B of the Chemical & Laboratory Safety Manual, which is published by EH&S. Further guidelines and safety procedures are set forth in various SafetyNets that are available through the EH&S Web site.

V. COMMUNICATING WITH EMPLOYEES ON HEALTH AND SAFETY ISSUES

A. Department Safety Committee Meetings

The Department Safety Committee shall meet regularly, but not less than quarterly, to discuss departmental safety matters. The Safety Committee’s duties include, but are not limited to:

1. Preparing and making available to affected employees, memos concerning health and safety issues;

2. Reviewing the results of the periodic, scheduled worksite inspections;

3. Reviewing investigations of occupational accidents and causes of incidents resulting in occupational injury, occupational illness, or exposure to hazardous substances, and where appropriate, submitting suggestions to management for the prevention of future incidents;

4. Reviewing investigations of alleged hazardous conditions brought to the attention of the Safety Committee; and

5. Submitting recommendations to assist in the evaluation of employee safety suggestions.

B. Laboratory Safety Meetings

During their regular lab meetings, Principal Investigators shall discuss with the employees under their direct supervision or control such issues as:

1. New hazards that have been introduced or discovered in the workplace;

2. Causes of recent accidents or injuries and the methods adopted by the department to prevent similar incidents in the future; and

3. Any health or safety issue deemed by the PI to require reinforcement.

All safety meetings will be documented using a Laboratory Safety Meeting Form [ Appendix II, Form III ], which should be kept in a binder with the laboratory's IIPP document.
C. Anonymous Notification Procedures

The department has a system of anonymous notification whereby concerned employees who wish to inform the department of workplace hazards may do so anonymously by sending a written notification to a Department Safety Coordinator by using Form IIId [ Appendix II ]. The Safety Coordinators will investigate all such reports in a prompt and thorough manner.

D. Postings

The bulletin board in the hallway next to 367 Briggs will be the departmental safety board. All pertinent University safety communications, departmental memos, safety tips, and important information will be posted on this board.

Mandatory postings in all work areas will include:

1. Health and Safety Hazards: A Student’s Right to Know [ EH&S SafetyNet #40 ]
2. Emergency Evacuation Plan [includes a map showing the floor plan of the building where your work area is located and the nearest exit(s) from the building].
3. Worker’s compensation NOTICE TO EMPLOYEES
4. EMERGENCY phone numbers [ Police, Fire, Ambulance poster ]

In addition to the above, all laboratories using hazardous chemicals must also post the following:

5. Material Safety Data Sheet and Chemical Emergencies [ EH&S poster ].
6. Guidelines for Chemical Spill Control [ EH&S SafetyNet #13 ].

Laboratories having specialized use permits (e.g., laboratories that use animals and/or infectious biological agents and/or radioactive materials) will be required to obtain specialized Safety Manuals and post additional materials. Refer to the specific Safety Manual to determine which postings are required for your work area.

E. Departmental Safety Notes

Departmental Safety Notes will be circulated by the Safety Committee when any health and safety issue must be promptly brought to the attention of all personnel.

F. Training

The department has training requirements designed to instruct each employee on general safety procedures as well as on safety procedures specific to the employee's job. These training requirements are discussed in Section VII of this program.

VI. ENFORCEMENT OF THE SAFETY PROGRAM

Federal and state law and University policy require that employees have the right to a safe work environment. The Entomology Department is dedicated to maintaining a safe work environment, providing training on safe practices, and assuring that safe practices are adhered to. Departmental
employees are required to follow established safety procedures and practices in the performance of their duties.

A. Incentive Program

Personnel evaluations at all levels of campus personnel include a safety performance assessment. An individual's strong commitment to and performance of the accident prevention needs of their position will result in favorable safety performance evaluations.

B. Disciplinary System

Employees have been advised in writing that safe work conditions, practices, and required personal protective equipment are mandatory. Non-compliance will result in discipline in keeping with University personnel policy.

VII. HEALTH AND SAFETY TRAINING

Awareness of the potential occupational safety and health hazards and knowledge of the Code of Safe Practices for the work area are critical to maintaining a safe and healthful work environment as well as preventing injuries, illnesses, and accidents in the workplace. The Department of Entomology is committed to providing training to each employee with regard to general safety procedures and with regard to any hazards or safety procedures specific to that employee's work assignment. Appendix I, Sections I and II, contains guidelines for developing a training plan for employees; Section III contains information about the training plan developed by the Department in accordance with those guidelines.

A. When Training Will Occur

Training will be provided as follows:

1. New employees are provided initial training upon hiring and prior to assignment.

2. Employees are provided training when assigned to a new task for which training has not been received.

3. Employees are provided training when the department is made aware of a new or previously unrecognized hazard.

4. Refresher training is provided when the Program Administrator believes that additional training is necessary.

B. Training of Principal Investigators

Principal Investigators are required to receive the same training that their employees receive on the hazards and safe practices within the PI’s area(s) of responsibility. To document training, use the same training materials and forms that are used to train the employees.

Additional training will be provided as needed.
C. Areas of Training

Training shall include general area safety and specific assignment or job title training, the potential occupational safety and health hazards, and the Code of Safe Practices for the area.

Types of training will include, but are not limited to, the following:

1. Safety training during New Staff Employee Orientation given by the Entomology Staff Development and Benefits personnel [Appendix II, Form IV and one or more of Form Va - Vf].

2. New TA Orientation and Safety Orientation given by the Teaching Resources Center.

3. Safety Information and Training Form that all employees will be required to read [Appendix II, Form IV and one or more of Form Va - Vf], then be given the opportunity to have all their questions and concerns answered prior to signing the training form.

4. Safety training and Shop Use Authorization Form for employees wishing to use the Entomology Shop [Appendix IV].

5. Chemical Hygiene Plan for any laboratory using hazardous chemicals. The format for this plan is found in Appendix B of the Chemical & Laboratory Safety Manual (published by EH&S). The Chemical Hygiene Plan sets forth procedures, equipment, personal protective equipment and work practices that are capable of protecting employees from the health hazards presented by hazardous chemicals. When established, this plan is to be used by the Principal Investigator to train employees under his or her immediate direction or control.

6. Training by EH&S that is mandated by University policy (e.g., Radiation Safety, etc.).

D. Documentation of Training

Departmental safety training and receipt of safety materials will be documented on a Training Verification form [Appendix II, Form IV and one or more of Form Va - Vf]; supplemental and refresher training will be verified on the Supplemental Training Verification form [Appendix II, Form VI]. Documentation will be retained for at least three years.

VIII. ACCIDENT INVESTIGATION

A. Departmental Policy

The department will investigate all known work-related accidents in a timely manner.

B. Responsibility/Procedures for Accident Investigation
The Safety Coordinators will investigate all known work-related accidents. If they feel that the cause of the accident falls beyond their expertise, they will enlist the help of EH&S, the Fire Department, the Police Department, or other appropriate campus or state authorities.
The report of the incident, as well as any recommendations, will be forwarded to the Program Administrator. The investigation of the incident will be reported on Form VII [Appendix II]. This documentation will be retained on file for at least three years.

C. Hazard Correction

Upon approval of the Program Administrator, the Safety Coordinators will act in a timely manner to have the problem corrected.

IX. CHEMICAL HYGIENE PLANS

All laboratories which use hazardous chemicals shall have in their Injury and Illness Prevention Program "a written program developed and implemented by the employer which sets forth procedures, equipment, personal protective equipment and work practices that are capable of protecting employees from the health hazards presented by hazardous chemicals used in that particular workplace." [GISO P5191(b)]. Refer to Appendix V for information about establishing this plan.
Appendix I. Guidelines for an Employee Training Plan; Safety Training Table

Appendix II. Department Safety Forms and Safety Training Packages
   A. Department Safety Forms
   B. Department Safety Training Package Guidelines

Appendix III. Building Evacuation Plan and Emergency Procedures
   A. Building Evacuation Plan
   B. Emergency Procedures

Appendix IV. Shop Policy

Appendix V. Chemical Hygiene Plan and Material Safety Data Sheets