



CALIFORNIA STATE UNIVERSITY, FULLERTON

## **Environmental Health & Safety**

### **Animal Care and Use Occupational Health Program**

#### **1.0 Regulatory Authority**

California Code of Regulations Title 8 sections 1510, 1511, and 3203 enforced by the California Occupational and Safety Health Agency (Cal/OSHA). These regulations provide guidelines for the general protection of personnel who work in laboratory animal facilities or have substantial animal contact. The National Institute of Health (NIH) Public Health Policy on Humane Care and Use of Laboratory Animals (September 1986) and 9 Code of Federal Regulations, Subchapter A govern animal care and use at the federal level.

#### **2.0 Policy**

It is the policy of California State University, Fullerton to protect employees and students from occupational injuries and illnesses. The overall safety of faculty, staff, and students is the main focus of this program so as to not subject them to avoidable risks and/or accidental injury or illness. No employee or student will be required to perform any task that would be considered unsafe or unreasonably hazardous.

To accomplish this, each employee or student that works in an animal laboratory or has substantial animal contact shall be provided with the proper materials, equipment, and training in accordance with federal and state requirements. This program also follows the guidelines set forth by the NIH.

#### **3.0 Purpose**

The purpose of this program is to establish a uniform set of guidelines for the handling and use of laboratory and wild animals at California State University, Fullerton. This program will provide information regarding the required pre-employment and periodic physicals and vaccinations, personal protective equipment, training, mechanism for reporting injuries and illnesses, zoonoses surveillance, and monitoring for biological, physical and chemical exposures.

This program will establish regulatory authority and responsibility of persons designated to implement and manage this program. It will assist in safeguarding the overall health and safety of the employees that may come in contact with laboratory and wild animals.

#### **4.0 Scope**

The scope of the Animal Care and Occupational Health Program at California State University, Fullerton focuses on all employees and employed students who utilize vertebrate animals for research and instruction.

## 5.0 Responsibilities

### 5.1 The Office of Environmental Health and Safety (EH&S)

- A. Develop and implement the Animal Use and Occupational Health program with consultation through the Institutional Animal Care and Use Committee (IACUC). Provide copies of the program to departments.
- B. Arrange pre-employment, annual, and termination physicals as needed. Develop immunization schedules.
- C. Provide assistance to individual faculty departments concerning implementation of the program.
- D. Maintain records of immunizations and physicals.
- E. Provide consultation and investigative action in the event of injury or illness.
- F. Arrange for the disposal of animal carcasses and specimens.
- G. Conduct exposure monitoring for personnel likely to become exposed to hazardous chemicals or radioactive materials through animal related research.

### 5.2 The Institutional Animal Care and Use Committee (IACUC)

- A. For the purpose of this program, forward protocols and proposals to EH&S based on perceived health risk to affected employees.
- B. Consult with EH&S on additional precautionary measures necessary for animal research and forward proposed experimental chemical and radioactive use information to EH&S.
- C. The Institutional Animal Care and Use Committee may suspend a protocol if a serious violation of the Occupational Health program occurs.

### 5.3 Principal Investigators

- A. Provide and document specialized training to employees and students under their direction.
- B. Ensure this program is followed by affected employees and students under their direction.
- C. Report injuries, i.e., scratches and bites, or abnormal illnesses of employees and students to EH&S.

### 5.4 Director of Animal Care

- A. Conduct inspections of work and animal housing areas and associated equipment to ensure compliance with CSUF's Injury and Illness Prevention Program.
- B. Provide and document training to employees and students under their direction.
- C. Ensure this program is followed by affected employees and students under their direction.
- D. Report injuries, i.e., scratches and bites, or abnormal illnesses of employees and students to EH&S.
- E. Maintain training records for at least 2 years.

## 6.0 Pre-Employment Physicals and Immunizations

### 6.1 Physical Examinations and Immunizations

Physical examinations and immunizations may be required of employees and students working at risk positions according the specifications of [Appendix A](#).

## 7.0 Training

An ongoing training program shall be provided which ensures that all persons working with animals are made aware of the hazards associated with such work. Principal Investigators and the Director of Animal Care shall ensure that every employee and student who works with animals will undergo training annually that, at a minimum, covers the following information.

- A. Hazards associated with working with animals.
- B. Proper personal protective equipment (PPE).
- C. General and specialized safety procedures.
- D. Incident reporting - bites, scratches, and unusual illnesses
- E. Record keeping.

## 8.0 Personal Protective Equipment (PPE)

The Principal Investigator is responsible for arranging for personal protective equipment. The provider shall ensure that this equipment is properly maintained and cleaned as necessary to ensure proper function of this equipment. Storage of this equipment shall be in a designated area. Proper PPE may include such items as clothing, eye protection, hand & foot protection, and respiratory protection.

The level of PPE required for animal handling is dependent upon the degree of hazard present and shall be determined by the Principal Investigator in conjunction with the IACUC and EH&S. The minimum level of PPE necessary when handling animals must include gloves and a lab coat. When handling an animal infected naturally or experimentally with a class two or greater agent, respiratory protection must be donned in addition to the minimum requirements. Respiratory protection is required for handling wild indigenous rodents and associated materials such as bedding or cages.

## 9.0 Personal Hygiene and Housekeeping

The following personal hygiene issues apply to all workers exposed to animals and associated materials:

- A. No food or drink, smoking or applying of cosmetics is allowed where animals are used or housed.
- B. No animals shall be kept overnight anywhere except in the designated animal rooms.
- C. Gloves shall be worn at all times when handling animals. All contaminated or infected substances should be handled in such a way as to minimize aerosols.
- D. In order to decrease the risk of contaminating street clothes and spreading contamination, laboratory coats shall be worn when working with animals. Lab coats shall be removed when leaving the work area.
- E. All work surfaces shall be decontaminated daily and after any spill of animal related material.
- F. Hand washing shall be done prior to leaving the laboratory for any reason.
- G. Hand to mouth infections must be guarded against by practicing safe handling techniques.
- H. Refer to the "Guidelines for Handling Animals in the Field" for personal hygiene instructions when performing fieldwork.

## 10.0 Injury and Illness Reporting

Supervisors and PI's should familiarize themselves with the procedures described in the Injury and Illness Prevention Program (IIPP). Departmental IIPPs act as an overlap to the Occupational Safety program with regard to: responsibilities, inspection procedures, training, corrective actions, communication and injury/illness reporting. All injuries should be reported on the appropriate form for either an Employee/Volunteer or Student/Visitor and sent to Risk Management.

### 10.1 Post Incident Procedures

- A. For minor cuts, bites, and scratches, wash the wound with running water and apply first aid as necessary.
- B. If the injury requires immediate treatment, report to the emergency room of the nearest health care facility. If injury occurs to a student on campus, contact the Student Health Center. If faculty or staff sustain an injury, treatment can be received at St Jude Heritage Medical Group-Occupational Health Services.
- C. In cases where immediate help is needed, phone 911 to summon University Police. They in turn will call for Fire Department Paramedics.
- D. If you are bitten by an animal that might have rabies infection, contact your supervisor or principal investigator immediately for instructions.
- E. Follow posted procedures for snake bites and provide specific information to the emergency medical staff. Follow current American Red Cross procedures for incidents which occur in the field.

### 10.2 Suspected Rabies Infection

- A. The animal must be confined immediately, kept isolated, clearly labeled as "rabies suspect" and observed for a period of 10 days. If the animal is wild, take steps to capture the suspect animal and use care while transporting the animal to an observation facility or veterinarian.
- B. Students must contact Student Health Services immediately to discuss the possibilities of rabies inoculations. Faculty/staff should visit the St Jude Occupational Health Services.

### 10.3 Reporting Injury or Illness

Report all accidents and injuries to appropriate PI immediately, and complete either the "Student Report of Injury" or "Employee Report of Injury" form available on line, at [riskmanagement@fullerton.edu](mailto:riskmanagement@fullerton.edu) as soon as possible.

## 11.0 Hazardous Agents and Exposure Monitoring

### 11.1 Biological Hazard

- A. Allergens: A relatively large proportion of the population is susceptible to allergic reactions resulting from the inhalation of fungal spores, pollen grains or animal proteins. Low molecular weight proteins from rats and mice and rabbit dander may cause acute clinical syndromes in some personnel. The use of a face mask can reduce or delay these reactions; a respirator may eliminate them. Individuals should disclose known allergies to the Principal Investigator before commencing any animal work. Personnel showing allergic symptoms should contact EH&S for advice.

- B. Infectious Agents: Experimental protocols involving infectious agents are evaluated by EH&S at time of IACUC protocol review to determine the required degree of containment. Guidelines for handling infectious agents are provided by the US Center for Disease Control (CDC). Contact EH&S for details. These guidelines specify recommended contaminants for individual agents; suitable classes of safety cabinets and handling methods are described. The University can make provision to house animals for some projects involving bio-hazardous agents. Refer to the CSUF Biohazard Safety Program for specific information on handling and disposal of infectious wastes.
- C. Zoonotic Diseases: Transmissible diseases such as TB, Herpes simiae, and Q fever, shall be addressed specifically depending the test species and scope of the study.

## 11.2 Chemical Hazards

A discussion of chemical hazards is included in the CSUF Chemical Hygiene Plan and Hazard Communication program. For information on any specific chemical, refer to the [material safety data sheet \(MSDS\)](#) obtainable through EH&S. Manufacturers are legally required to make MSDSs available (including hazard information) to anyone submitting a written request.

The IACUC will forward protocol information concerning the proposed nature of chemical use to the Chemical Hygiene Officer (CHO) at the time of review. Based on this information, EH&S will conduct exposure monitoring if any risk of personnel exposure is evident and will make recommendations on the protocol to minimize exposures.

- A. Carcinogens: Operations involving regulated carcinogens are strictly subject to Cal/OSHA regulations. EH&S maintains a current classification of declared carcinogens and detailed regulations concerning their use. EH&S requires specific precautions to contain the inoculation and subsequent excretion of carcinogens. The formation and excretion of carcinogens from non-carcinogenic precursors (e.g., the urinary excretion of nitrosamines following streptozotocin inoculation) must also be controlled. The use of disposable caging minimizes the problems and risks associated with waste bedding disposal and cage recycling. Guidelines are provided in the Chemical Hygiene Plan.
- B. Sterilizing Agents: Sterilizing agents such as steam and phenolic compounds are often used in animal care facilities, present potential physical and health threats. Investigators planning these agents either in experimental procedures or as decontaminates must obtain specific instructions the Bio-Safety Officer.
- C. Anesthetics and Controlled Substances: Experimental use of anesthetics and controlled substances shall be reviewed by the Bio-Safety Officer for special handling and security practices.

## 11.3 Physical Hazards

- A. Physical Injury

The routine use of heavy equipment and the frequency of wet, slippery floors increases the element of risk for physical injuries in animal facilities. All physical injuries, including wounds and scratches (whether from animal bites or other causes), should be reported immediately to the Principal Investigator.

## B. Radiation Hazards

Direct exposure to acute or chronic radiation sources is controlled by the University Radiation Safety Committee. Radioisotope, ionizing and non-ionizing equipment usage is governed by the Principal Investigator's Radiation Use Application (RUA) reviewed and approved by the Radiation Safety Committee. The RUA shall be approved before the protocol is reviewed by the IACUC.

Risk of radiation exposure comes from the absorption, inhalation, or ingestion of labeled compounds during animal treatment or from the handling of subsequently contaminated bedding. Animals treated with isotopes should be housed in separate rooms, which should be only wet-cleaned. High levels of hygiene and the use of separate overalls, dust masks, and rubber or plastic gloves for each room are essential to safe working conditions.

Monitoring of personnel exposures to radioactive material will be conducted by the Radiation Safety Officer. Technical safety precautions and RUA applications are governed by the Radiation Safety Manual.