Collected Rules and Regulations

Research

Chapter 400: Animal Research

400.010 Health and Medical Surveillance Program for Laboratory Animal Care

Occupational Health and Safety Program for Laboratory Animal Care and Use Personnel

Executive Guideline No. 21, 11-11-83.

A. **Purpose** -- This Executive Guideline is intended to provide general direction for the development and maintenance of an **Personnel Health and Medical Surveillance** Occupational Health and Safety Program (OHSP) tailored to the needs of persons whose employment involves frequent contact with laboratory animals and/or animal tissue. Because of this contact, these individuals may be considered to experience a greater risk of encountering certain health hazards than is the case with the general population. Specific types of health hazards of special concern include development of allergies, physical injury, exposure to cleaning and disinfecting chemicals, infectious agents used in experiments or which occur as spontaneous and rarely, zoonotic diseases in research animals, and toxic or carcinogenic chemicals which may be used as experimental agents on those which are used as detergents, disinfectants, etc., in the performance of animal colony studies.

In the event that specific known hazards (biologic, radiation or chemical) are introduced into areas where laboratory animals are housed or into the animals themselves, then specific additional personnel health or medical surveillance procedures beyond this basic program may be indicated to address hazards presented by the specific agent.
B. **Scope**

1. **This program** The OHSP is applicable to all University employees whose work involves frequent contact with laboratory animals and/or animal tissues, defined as follows:

   a. **Frequent contact** — 20 or more hours per week in laboratory animal housing area or other areas where laboratory animals are manipulated. "Contact" is any contact with animals, animal waste and unfixed animal tissues and fluids.

   b. "Laboratory animals" -- means any University owned animal held in confinement and upon which that is produced for or used in research, experimentation, testing or teaching is performed.

2. **It is emphasized that the program** The OHSP described herein is basic in that it applies to a baseline level of risk experienced by personnel using or caring for laboratory animals and/or animal tissues as part of their assigned job duties. This program is not sufficiently broad in scope nor sufficiently detailed to address situations in which specific hazardous agents are used that are known to present specific risks above the routine. In these cases, specific procedures may be indicated to protect personnel, monitor exposure, and/or facilitate diagnosis treatment in the event of exposure.

C. **Responsibilities**

1. **It is the responsibility of each campus Institutional Animal Care and Use Committee (IACUC) to review the adequacy of their OHSP program semiannually.**

2. **Funding of the OHSP shall continue to be the responsibility of the individual campus.** Direct animal
care funds such as "per diem" charges are not appropriate for funding of this program.

1.3. Animal facility directors or the individual in each animal facility Individuals (Principal Investigators, facility directors/managers or supervisors) responsible for hiring or supervising full-time, part-time, or student labor for who have contact with laboratory animals, animal waste and unfixed animal tissues and fluids care will bear responsible for seeing that such persons hired or supervised who are at risk be included enrolled in the Personnel Health and Medical Surveillance Program appropriate OHSP program.

2.4. Principal investigators will be responsible for the development of safety protocols for animal care and use personnel when their studies impose personnel health risks beyond the routine. To assume appropriate implementation, safety protocols should be worked out developed in consultation with the appropriate Committee (Biosafety, Radiation etc), the Attending Veterinarian and animal facility directors or supervisors.

3. Funding of the Personnel Health and Medical Surveillance Program OHSP should continue to be the responsibility of the individual campus or UMca unit (as in the case of the Sinclair Farm site). Direct animal care funds such as "per diem" charges should not be considered appropriate for funding of this program, however.

4. The content of the basic Personnel Health and Medical Surveillance Program will be reviewed annually by the UM system Animal Resources Advisory Committee.

It is the responsibility of each campus Institutional Animal Care and Use
Committee (IACUC) to review their OHSP program semiannually.

(4) Each OHSP shall include the following:

(a) Mandatory training of personnel – regarding occupational hazards associated with the care and use of laboratory animals, including information related to animal-related hazards such as allergies, bites and scratches, zoonotic disease, physical hazards such as sharps handling and the use of hazardous agents.

(b) Risk Assessment – for each individual, to mitigate risks associated with each individual’s personal medical status; this will include an assessment of the specific hazards to the individual of the animals and materials used; the exposure intensity, duration and frequency, the susceptibility of the individual to harm, and the individual’s history of occupational illness and injury in the specific workplace. The Risk Assessment will also include identification of the necessary immunizations and personal protective equipment for each individual.

(c) Monitoring – on-going monitoring of hazards should occur, including periodic inspections and on-going assessments of risks to determine appropriate strategies to minimize or manage the risks.

(d) Reporting – all incidents/ accidents must be reported, including “near misses” to the employee’s supervisor.

(e) Operational and day-to-day responsibility for safety in the workplace resides with the laboratory or facility supervisor (e.g. principal investigator, facility director or a staff veterinarian) and depends on safe work practices by all employees.

D. Personal Protective Measures Control and Prevention Strategies
1. Each OHSP should identify potential hazards in the work environment and conduct an assessment of the associated risks, so as to reduce and manage such risks at minimal acceptable levels.

2. Personal protective measures should be made available to individuals including but not limited to:

1.3. (i) Protective Clothing

   a. Depending on the level of risks, suitable attire and personal protective equipment should be provided by the University for use in animal facilities and laboratories in which animals are used. Soiled attire should be disposed of, laundered or decontaminated by each campus. Outer garments worn in animal areas should not be worn outside of the animal facilities unless covered. Laboratory clothing and shoes to be worn only at work should be considered for laboratory animal workers to minimize the risk of routine hazardous materials being carried home or to other locations on street clothing. Work clothing must be changed with sufficient frequency to avoid prolonged exposure of personnel to contaminants that have soiled the clothing and to ensure that clothing does not spread contamination within the workplace. Where such clothing is provided, it should be decontaminated or laundered in University laboratory animal facilities to avoid exposing employees of commercial laundries or others to contaminated garments.

   b. Particle masks and surgical or exam gloves should be available or use by employees and may be required under some situations worn while handling animals. These items, if routinely used, will retard the development of sensitivities to allergens of
laboratory animal origin and will help reduce symptoms in employees already sensitized.

c. Eye protection is mandatory when handling concentrated acids, caustics, detergents, disinfectants, and other irritant chemicals.

d. When known hazards are in-use which are beyond those routinely found in the laboratory animal quarters or laboratories, special personal protective equipment appropriate to the nature of the hazard should be used. Examples of such equipment include but are not limited to hearing protection, arm protectors, face masks, goggles and respiratory protection.

2.4. (ii) Personnel Hygiene

a. Standards of personnel hygiene must be high to protect both personnel and laboratory animals.

b. Hand Washing and/or Disinfection - frequent hand washing/disinfection is necessary. In particular, at the start of the workday, when changing gloves, upon leaving work for breaks, meals, or rest rooms, and then when returning to work.

c. Eating, drinking, and smoking use of tobacco products, application of cosmetics, handling or applying contact lenses are prohibited in laboratory animal quarters and other areas where laboratory animals or hazardous agents are manipulated used.

(iii) Medical Surveillance

a. The purposes of medical surveillance is are to detect identify persons who may be at higher than normal risks for exposure related illness or injury, and to monitor for and to detect changes in the state of health of the worker which may be due to exposure to animals or hazardous agents.
b. Therefore, the animal facility director/manager/supervisor or the program principal investigator will provide the examining physician occupational health medical professional with a description of the employee's duties which includes the animal species contacted and the toxic, biologic, and radiologic agents to which the employee may be exposed under investigation.

c. The employee should then provide the occupational health medical professional with a confidential health history so that an accurate risk assessment can be made and further action can be recommended.

d. Following the medical examination risk assessment, the employee and his/her supervisor must be provided a written opinion-report from the examining physician occupational health medical professional stating whether the employee has any medical condition that would place him at increased risk of material impairment to his health what actions are required to maintain a safe work environment for the employee. The physician's opinion must state the employee has been informed of any medical condition which requires further examination or treatment. The employer must provide a copy of the physician's written opinion to each employee.

(iv) Immunizations

E. a. An appropriate immunization schedule should be adopted by each OHSP. Pre-exposure immunization should be offered to employees at risk of infection or exposure to specific agents, such as rabies, tetanus or hepatitis B. Current, applicable vaccine information statements must be provided whenever a vaccine is administered. Each employee’s immunization history should be evaluated for completeness and currency at the time of employment and re-evaluated when the employee is assigned job responsibilities with a new hazard. Employees may decline a recommended vaccine but must sign a waiver; employees will not be permitted to decline a recommended vaccine if the employee’s failure to get such
vacines places other personnel or laboratory animals at a material risk of harm.

1. Physical Examinations
   a. General physical examinations should be conducted at the time of employment to establish the health status of the individual at that time and to evaluate for exceptional risk due to underlying conditions or disease states.
   b. Physical exams should also be conducted annually during employment. In cases where specific known hazards exist, it may be indicated that the frequency of exams be increased and/or specific diagnostic procedures be added to the general exam.

2. Reference sera should be maintained and updated routinely for all personnel working with laboratory animals or fresh animal tissues.

3. Immunizations -- All personnel working with animals should be immunized against tetanus. Those working with animals that are raised in other than a laboratory setting should also be immunized against rabies virus. Where specific biologic hazards are used against which vaccines, bacterins, or immune sera are available, their use should be considered by the animal facility director, the program's principal investigator, and the physician responsible for the employee health program.

4. Tuberculin tests should be conducted as a part of the general physical exam at the time of employment and annually thereafter.

8. (v) Report of Injuries:
a. Effective February 16, 1981, the University of Missouri established the following policy for reporting accidents and supplying the proper medical care. The University, as well as the State of Missouri, requires that all accidents or incidents (including near misses), including but not limited to bites, scratches, allergic reactions or other injuries, shall be reported to one's employee’s superior immediately (even if one does not feel medical treatment will be required at the time).

5. At that time, the supervisor will complete the Report of Injury form and direct the employee to the appropriate and approved doctor or medical facility. The employee will be given, at that time, a Referral for Medical Care Form. The top half of the form will be completed by the supervisor. The employee will then report to the designated doctor or medical facility with the Referral for Medical Care form. Upon arrival at the doctor’s office, the Referral for Medical Care form is given to the doctor. This form will act as authorization for the doctor to provide medical treatment. The employee must request that the lower portion of the form be completed by the doctor and given back to employee. The employee will take the completed section of the form back to the supervisor immediately.

The above procedure must be followed on all accidents, except those of an extreme emergency nature. Emergency cases are those that require emergency treatment immediately, such as severe bleeding, amputation, breathing difficulties, or those injuries requiring immediate hospitalization.

b. Each campus shall develop its own procedure for handling accidents or incidents; however, at a minimum, each procedure must include a written record documenting the nature of the accident/incident including date and location, the identification of all persons involved or who witnessed the accident/incident, including contact information, and the nature of any injuries sustained as a result of the accident/incident.

c. The procedure for the handling of accidents shall include an assessment of the need for medical attention.