



May 29, 2012

Dear Sir / Madam;

Drexel University, in its continuing effort to promote a safe and healthy workplace environment, would like to inform you that your representative may be working in areas known to contain laboratory research animals and further inform you that certain types of animal may carry with them zoonoses or allergens that could impact the health of your employees.

In an effort to reduce the likelihood of exposure, Drexel University requests that you review the following policy. Attached is a certification form that must be completed and returned via facsimile to (215) 762 – 7970. Certification is required for authorization to enter the above referenced facilities.

Drexel University Policy for Visitors and Multi-employer Work Sites

All contractors, vendors, students and visitors must be informed of the hazards associated with laboratory research animals. Communication of such hazards should be documented accordingly and maintained in a permanent log. Additional requirements are as follows:

Un-attended Occupancy

Prior to entering any Drexel University Vivarium / animal room, the employer of these individuals must demonstrate that they are aware of the hazards associated with laboratory research animals and must provide proof of training and medical competency (as outlined in Drexel's Occupational Health Program for Individuals working with or near Laboratory Research Animals) of the individuals requesting to enter the above referenced areas prior to the individual being allowed to work/occupy these areas unattended. *In the event that an individual(s) is self-employed, a student or a visitor, they must fulfill the same in lieu of the employer.*



Attended Occupancy

Demonstration of medical competency will not be required providing that

- a) the individuals have been informed of the associated hazards,
- b) communication of such hazards has been documented in a permanent log,
- c) negative pressure respirators will not be required,
- d) occupancy will be limited to a short duration, and
- e) the individual will be accompanied at all times by the University Veterinarian or ULAR Manager.

Sincerely,

Jonathan M. Chase, MS
Executive Director of Safety and Health
Drexel University
215.895.5891



Hazards Associated with Animal Research Facilities at Drexel University

Identification of Hazards. Primary prevention of occupationally acquired injury or illness is achieved by controlling or reducing hazards, and identification of hazards is paramount. Program managers will coordinate reviews of animal facilities and the laboratories of investigators who conduct animal research to identify hazards in the workplace. The reviewers should understand the operations well enough to construct scenarios that might result in personal injury. The purpose of the review is to be discussed openly with the workers and their input sought. A priority list will be compiled on the basis of the magnitude and severity of identified risks. Consideration needs to be given to the number of people who are exposed to the hazard, the potential effect of the hazard on the people, and the magnitude of the exposure. Action plans will be developed from these interactions and implemented by program supervisors and staff.

Exposure Control Methods

Exposures to occupational hazards are controlled through the application of engineering controls, work practices, and the use of personal protective equipment. If engineering controls do not adequately control the exposure potential, work practices are modified to help to minimize exposure potential. Personal protective equipment might be required to provide a barrier between employees and hazards that cannot be otherwise controlled.

Physical & Chemical Hazards

Animal care and use is inevitably associated with situations that require safe practices to protect workers from physical and chemical hazards. This section outlines safety procedures for physical and chemical hazards likely to be encountered by animal users and caretakers.

Animal Bites and Scratches. Bites and scratches when in contact with laboratory or wild animals are largely preventable through proper training in animal-handling techniques. These techniques are outlined in Appendix C, Section 5. Anyone working with animals at Drexel University who incurs a job-related injury due to a bite and/or scratch from any animals must adhere to the procedures described in the IACUC Policy and Procedures manual.

Sharps. Sharp objects such as glass, syringes, plastic pipettes, and pipette tips contaminated with biological waste or pathogenic material should be placed in a separate rigid, leak-proof, puncture resistant container which is then placed in a red or orange biohazard bag, labeled with list of contents and secured for removal by the hazardous waste personnel.



Flammable Materials. Flammable/explosive materials are to be stored in flammable storage cabinets and MSDS must be readily available to employees for each hazardous chemical used in the work area. MSDS must contain the information outlined in the Drexel University's Chemical Hygiene Plan provided by Risk Management including labeling, segregation, and current chemical inventories.

Pressure Vessels. Compressed-gas cylinders, high-pressure washing equipment, steam generators and autoclaves contain steam and contents under high pressure. Compressed-gas cylinders are to be capped when not in use. Cylinders must be stored away from ignition sources, excess foot traffic, or where they may be damaged. Also, cylinders must remain chained at two-thirds height to a permanent structural component of the building to avoid falling. Employees must be trained and demonstrate competency prior to using high-pressure washing equipment, steam generators and/or autoclaves.

Lighting and Electricity. Lighting and electric maintenance is conducted by Facilities Management at Drexel University. All employees are expected to contact Facilities Management at any indication of a lighting or electrical problem.

Ultraviolet Radiation, Lasers, Ionizing Radiation. Employees and students working in the presence of UV radiation are to use skin and eye protection. Personnel who work with or around lasers must shield themselves from the laser beam. Since laser surgery can produce substantial aerosols, fumes and toxic gases, these must be controlled. Use of gamma or beta radiation, irradiators, and/or diagnostic x-ray machines by animal users requires appropriate training of personnel and personal protection is required. Training of personnel for any of these applications is through the University Radiation Protection Facility at Drexel University, and all animal protocols utilizing any of these applications must first be approved by the Radiation Protection Committee at Drexel University prior to IACUC review.

Housekeeping. Housekeeping requirements for each animal species housed at Drexel University is clearly outlined in the appropriate SOP. All animal users and caretakers at Drexel University are required to follow these specified procedures.

Ergonomic Hazards. Physical trauma resulting from lifting heavy loads and small repetitive stresses can be minimized with proper education and engineering controls. All employees of the animal care program at Drexel University must take a short course on minimizing physical trauma, which is conducted by the animal care program. Also, Risk Management has an ergonomic evaluation/training program.



Machinery. All machinery with moving parts have been evaluated within the animal care program at Drexel University, and appropriate guarding has been installed to eliminate hazards. All employees of the animal care program are to complete appropriate training offered through the program prior to using any machinery.

Noise. The animal care program is aware that noise exposure is a hazard in the workplace. If noise is considered problematic Facilities Management at Drexel University is contacted to evaluate noise exposure and engineering controls will be applied to control the hazard.

Chemical Hazards. All employees and students using chemicals are to complete the laboratory chemical safety course offered by Risk Management at Drexel University and complete yearly refresher courses. Investigators who use animals are encouraged to certify their laboratory to demonstrate that the laboratory fulfills the requirements of the Chemical Management Plan enacted by Risk Management. This certification identifies the hazards located in the laboratory and provides general information helpful during emergencies. Information required by Risk Management prior to laboratory certification includes a chemical inventory, material safety data sheets, standard operating procedures and personal protective equipment information, and the completion of a responsible party information sheet.

Biohazards. Biohazardous materials include blood and other potentially infectious materials such as blood products, semen, vaginal secretions, cerebral spinal fluid, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid, amniotic fluid, concentrated HIV (AIDS) and HBV (Hepatitis B) viruses, and saliva in dental settings. All employees and students using biohazardous materials are to complete the training program in bloodborne pathogens. This course is intended to reduce on-the-job risks for all employees exposed to blood or any other potentially infectious material by use of engineering controls, appropriate work practices, and personal protective equipment.

Biohazardous Waste. Biological waste derived from human sources such as blood, body fluids, tissues, tumors, human cell lines, etc., and materials used in processing biohazardous material including vacutainers, syringes, plastic pipettes and pipette tips must be put into a red or orange bag labeled and secured for disposal by hazardous waste personnel. Sharps and sharp objects that are contaminated with biohazardous waste should be placed in a rigid leak-proof, puncture-resistant container labeled and secured for disposal by hazardous waste personnel.

Hazardous Waste. Hazardous wastes are materials characterized by ignitability, corrosivity, reactivity, and/or toxicity. Whenever there is a doubt about waste being a hazardous waste, contact Risk Management at 965-0647. Hazardous waste must be stored in clean containers that are in good condition, non-leaking, and compatible with the waste



being stored. One-gallon glass hazardous waste containers with screw top lids are available at no charge to university personnel from Laboratory Stores, Engineering Research Center, and Life Sciences C Wing. The container holding the waste must be marked with the words "HAZARDOUS WASTE" and with a description of the contents of the container. The following information must be included on tags: chemical name, amount, volume %, generator, phone, date, department, and building room. When the waste container is ready for pickup and the waste tag has been completed, call Risk Management at 965-0647.

NOTE: The following manuals outlining Drexel University policies and procedures and the requirements of the federal Occupational Safety and Health Administration are available from Risk Management: Drexel University Chemical Hygiene Plan, Drexel University Exposure Control Plan for Bloodborne Pathogens, and Research and Sponsored Programs Policies and Procedures RSP 105 Hazardous Chemical Waste.

Allergens

All individuals exposed to animals held at Drexel University, either casually or for research, should be aware that laboratory animals (particularly rats, rabbits, guinea pigs, hamsters, cats and monkeys) are sources of potent allergens to sensitized persons. Virtually all human beings are capable of developing allergic reactions; however, some individuals are more susceptible than others. These people are more likely to develop IgE antibodies to allergies owing to an inherited tendency. These people often develop allergic disease such as allergic rhinitis, asthma and atopic dermatitis (eczema) when chronically exposed to allergens.

Work practices and personal protective equipment can reduce the potential development of laboratory animal allergy and perhaps alter its severity. All animal users at Drexel University are made aware of the risk of allergies during the certification process and instructed in proper measure to control and avoid exposure as much as possible. When possible, appropriate work assignments based on exposure reduction and avoidance measures will be undertaken if individuals become sensitized and develop symptoms resulting from their exposure.

Zoonoses

The Animal Care Program (ACP) has established an Animal Quality Assurance Program, which includes serological monitoring of established breeding colonies of rodents, accompanying health reports for large animals, and routine examinations and vaccinations of large animals. Rodents are routinely tested for a variety of viral, bacterial, and protozoal diseases. Some of these diseases can be transmissible to humans.



All positive reactors are terminated, after consultation between the veterinarian and the principal investigators using these animals.

As part of the Quality Assurance Program, the ACP has limited the use of cats and dogs to acquisition from Class A dealers. This means all dogs and cats used at this institution have known vaccination and worming histories, and therefore do not pose a risk for transmission of rabies to personnel working with these animals. There is also a written standard operating procedure for personnel being bitten and/or scratched; any animal biting a person is routinely quarantined for 10 days for observation.

Sheep and goats can be carriers of Q fever, a rickettsial disease caused by *Coxiella burnetii*. Sheep have been the primary species associated with outbreaks of the disease in laboratory-animal facilities. Humans are at the highest risk of infection when working with pregnant sheep or goats; the placenta of an infected ewe can contain up to 10⁹ organisms per gram of tissue. In order to reduce the risk of infection to personnel working with pregnant ewes, all sheep are acquired from a Q-fever negative flock from California, and standard operating procedures for working with these animals have been written and distributed to people at risk of infection.

Non-human primates can harbor many potential zoonoses. These animals are quarantined for no less than five weeks. During this time, the primates are routinely tested for tuberculosis and enteric bacterial diseases. If necessary based on past medical history, animals are routinely vaccinated for measles and wormed with appropriate agents. As part of the Occupational Health and Safety Program, personnel working with these animals are routinely (every six months) tested for tuberculosis. It is also recommended that these people are current on their vaccinations for measles.



Certification of Competency to Work with or near Laboratory Research
Animals

Company Information

Name _____

Address _____

Phone _____

Fax _____

Contact Person _____

Completion of this form acknowledges that _____ has been informed of the hazards associated with laboratory research animals at Drexel University and further indicates that _____ is competent to work (to include training and occupational health services) with or near laboratory research animals in accordance with Drexel University's Occupational Health Program for Individuals Working with or near Laboratory Research Animals..

Employee's Signature

Date

Company Representative's Signature

Date