Research Animal Contact Program Handbook

Florida Institute of Technology

High Tech with a Human Touch™

Office of Research

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1. OVERVIEW OF RESEARCH ANIMAL CONTACT PROGRAM

The Florida Institute of Technology's Research Animal Contact Program is for individuals who have animal contact. This includes a medical monitoring and an educational component. Medical monitoring is based on the type and frequency of exposure to animals and consists of a risk assessment, follow-up assessments and, tests/immunizations as needed. It is part of the University's Office of Research (OOR). The educational section provides individuals with health information specific to animal contact and promotes safe working practices.

The OOR and the Institutional Animal Use and Care Committee (IACUC) jointly oversee the Research Animal Contact Program. The Holzer Health Center (HHC) is the medical provider for the program, and can be reached at 321-674-8078. The OOR maintains the Risk Assessment Form.

This Research Animal Contact Handbook is intended to provide information for individuals working with animals in the laboratory, their tissues or animals being studied in the field.

Short term visitors from other institutions should provide to the OOR evidence of current participation in a medical surveillance program at their home institution. Without such documentation, visitors will be required to participate in the FIT Research Animal Contact Program. Individuals involved in isolated one-time, non-recurrent exposures shall be informed of potential dangers and medical precautions, and are not required to participate in the program. The primary responsible party (principal investigator of the protocol) shall be responsible for assuring compliance with the notification requirements for these individuals. **No work with animals or their tissues is permitted prior to enrollment in the Research Animal Contact Program.**

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2. MEDICAL MONITORING PROGRAM FOR ANIMAL CONTACT

The Florida Institute of Technology's medical monitoring program is a comprehensive program for individuals having animal contact in association with University-sponsored activities. Individuals covered by the program include faculty, staff, students, and volunteers or visitors who work with vertebrate animals or in proximity to them, or who handle certain animal tissues, body fluids or wastes. The program is intended to comply with the recommendations made by the Committee on Occupational Safety and Health in Research Animal Facilities and the Institute for Laboratory Animal Resources. These recommendations have been published in the Guide for the Care and Use of Laboratory Animals, (National Research Council; National Academy Press; Washington DC; 1996) and Occupational Health and Safety in the Care and Use of Research Animals (National Research Council; National Academy Press; Washington DC; 1997).

The program requirements are based on the type of exposure to animals. Employee identification and tracking will be managed jointly by IACUC and the Office of Research.

Individuals with animal contact shall be provided the Research Animal Contact Program Handbook. They shall be included in a risk assessment program that covers contact information, immunization history and a health questionnaire. The risk assessment will be updated on a periodic basis. An exit evaluation upon termination of an employee's animal work will be offered by the Holzer Health Center.

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3. SUMMARY OF IMMUNIZATION/TEST REQUIREMENTS

Immunization/Tests		
Procedure	**Exposure Condition**	**Frequency**
Tetanus Immunization	All individuals with animal contact	Current within 10 years*
Rabies Immunization Series	All employees handling unvaccinated carnivores or their tissue	Immunization, booster, or positive rabies titer current within 2 years
Serum Banking	If directed by physician, depending on exposures and/or concerns	As directed by physician
Respirator Clearance And Fit Test	When medically necessary to combat animal allergies	Clearance- before assignment Fit-test –annually – EHS may perform.
Medical Consultation	When deemed necessary by Occupational Medicine personnel	Before assignment and as determined by the HHC medical personnel.

* The Public Health Service Advisory Committee on Immunization Practices recommends immunization against tetanus every 10 years. An immunization is also recommended if a particularly tetanus-prone injury occurs in an employee where more than five years has elapsed since the last immunization.

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4. OCCUPATIONAL INJURY REPORTING PROCEDURE

Injuries occurring on campus must immediately be reported to the FIT Security at 321-674-8111 or *8111 if on a campus phone. FIT security will come on scene and create an injury incident report and assist whether the individual needs transportation to the HHC or to a hospital.
If the injury occurs in the field, report to the nearest hospital. A report should be documented with Security the day the individual reports back to work/campus.

If the injury will result in loss of work time or require medical treatment additional reports will need to be completed. HHC and Security can assist with starting the proper paperwork in conjunction with the Office of Risk Management. The report should be completed within 7 calendar days of the occurrence/filing of the injury. This is for faculty, staff and employees only. https://policy.fit.edu/policy/7163

5. FORMS ASSOCIATED WITH THIS PROGRAM

Risk Assessment for Animal Contact

Renewal - Risk Assessment for Animal Contact

These forms & their instructions may be obtained from the Office of Research and must be completed as applicable.

6. HEALTH INFORMATION

The Public Health Service of the U.S. Department of Health and Human Services directs research/ teaching institutions to develop programs that promote the health and safety of employees who have animal contact. This document contains informational material about several specific conditions or practices with which animal researchers should be familiar.
Steps to follow in the case of any occupational injury, illness, or hazardous exposure are:

1) Contact Security at *8111 or (321)674-8111. Security will assist with transportation to HHC or hospital if necessary. Security will document the incident. HHC/hospital will provide any medical treatment necessary.
2) When the individual is physically able, the supervisor should be contacted and notified of the incident.
3) If a Workers Compensation Claim needs to be filed contact the Office of Risk Management (321)674-8885.

a) Personal Hygiene

There are a number of personal hygiene issues which apply to all researchers with animal contact. Attention to personal hygiene protects not only the worker, but also prevents zoonotic diseases or allergens from being carried home whereby family members may be exposed.

1. There will be no eating, drinking, smoking, gum chewing, contact lens handling or applying of cosmetics in areas where animals are housed or used.
2. Laboratory coats or other protective clothing should be worn over street clothes when working with animals. This will minimize the contamination of street clothing. Protective clothing should be left in the lab or animal facility and should not be worn in common areas, lavatories, when eating, or in public eating areas.
3. Careful hand washing is required after handling of animals and prior to leaving the laboratory or animal facility.
4. All work surfaces should be decontaminated daily and after any spill of animal related material.

b. Tetanus

The Public Health Service Advisory Committee on Immunization Practices recommends immunization against tetanus every 10 years. An immunization is also recommended if a particularly tetanus-prone injury occurs in an employee where more than five years has elapsed since the last immunization. Every employee should have up-to-date tetanus immunizations. The current tetanus immunization given by the Holzer Health Center, Tdap, protects against tetanus, diphtheria and pertussis.

c. Human Allergies to Animals

Allergy to animal hair and dander is common and therefore one of the most important occupational problems occurring in workers exposed to animals. Allergic reactions are expressed in a number of ways including allergic rhinitis (a condition characterized by runny nose and sneezing similar to hay fever); by allergic conjunctivitis (irritation and tearing of the eyes); by asthma, or by atopic dermatitis (a skin condition which is caused by contact with a substance to which an individual is allergic). Allergy to animals is particularly common in workers exposed to animals such as cats, rabbits, mice, rats, gerbils and guinea pigs. There is still some controversy regarding exactly what substance causes the allergy in a certain individual. Previously it had been thought that most allergies were caused by dander and debris from the skin and fur of an animal. More recent studies seem to suggest that exposure to animal urine, saliva and fecal matter may be equally or more important. Exposure to animal urine may occur either through direct urine contact with skin or more commonly by inhaling dust from the bottom of a cage which has been contaminated with urine or fecal material.

Various studies show that 15 to 20% of workers exposed to animals will develop symptoms of allergy. This percentage may be even higher since some people are forced to leave their jobs because of the severity of the allergies that develop. Most of these reactions are of the allergic rhinitis and allergic conjunctivitis type. Less than half of these will actually be asthma. People who have a prior personal history or family history of asthma, hay fever, or eczema will be more likely to develop asthma after contact with animals, but these people do not seem any more likely to develop rhinitis and conjunctivitis than do people without such personal or family history. Everyone should exercise certain precautions to attempt to prevent animal allergy. These attempts should not be focused only on people with atopic history. Symptoms can develop anywhere from months to years after a person begins working with animals. A majority of the individuals who are going to develop symptoms will do so within the first year. It is extremely unusual to develop symptoms after more than two years of animal contact. Certain procedures should be routinely followed in order to prevent the development of animal allergy. Animals should be handled in extremely well ventilated areas to prevent build up of various particles in the air. Workers may want to wear gloves to prevent direct exposure to the animals. This applies to animal urine as well as to animal dander. In order to prevent inhaling contaminated material, cages should be changed frequently and masks should be worn during the changing of cages.

Despite the best preventive techniques, some individuals will develop allergies after contact with laboratory animals. Rarely, this will be so severe that a person is forced to change their line of work. More commonly, this can be controlled with the increased use of masks or respirators while working with animals and the possible use of medications. Desensitization therapy has been done for some individuals but this is not as effective for animal allergies as it is for some other types of allergies. Anyone with significant symptoms related to animal exposure should obtain medical advice.

d. Rabies

Rabies is a relatively rare and devastating viral disease which results in severe neurological problems and death. Most cases of rabies occur in wild carnivores although any mammal can contract the disease. The disease is virtually unheard of in common laboratory animals. The exception to this is with dogs and cats. If an individual is bitten in the field report to the hospital immediately. Security and supervisor are notified when the individual returns to work.

Rabies is an endemic disease in Florida, especially in skunks, foxes and bats. Note that up to 30% of the bats found on the ground are positive for rabies. Sporadic cases have been well-documented in other species of wildlife, as well as domestic animals. Animals and animal tissues field-collected in Florida should be handled with care. Precautions should take into account the fact that infected animals may shed the virus in the saliva before visible signs of illness appear and that rabies virus can remain viable in frozen tissues for an extended period. Persons handling neurologic tissues from unvaccinated carnivores or wild animals are at greatest risk. There is a human vaccine that offers protection for those persons working with this material or with unvaccinated animals. Vaccine titers are checked periodically to ensure adequate vaccine protection.

e. Bites & Scratches

Most animals are capable of inflicting bites or scratches. The bacteriology of bite wounds reflects the animals' oral flora. Learning/applying the proper methods of handling the species with which you work may serve to prevent bites and scratches. Protective garments such as gloves and long-sleeved laboratory coats limit injury to the hands and arms.

Bites or scratches should be immediately washed with soap and running water. The individual should call Security at *8111 and immediately report to HHZ.

Laboratory rodents are purchased from laboratories which typically exclude zoonotic agents. For this reason, there is usually limited concern for disease from research rodents. Exceptions would include animals which have been inoculated with biohazardous material (ie, LCMV) during the course of the research being performed with the animal. There is always concern about a secondary bacterial infection that may occur. Common skin and intestinal bacteria present on the individual or the animal can infect the bite or scratch wound and cause these secondary infections.

f. Venomous spine injuries (Lionfish sting)

1. Whenever possible, never work with this species if you are alone.
2. Remove any obvious foreign material such as spines.
3. Rinse wound with clean water.
4. Lionfish venom is partly broken down by heat. Rapid application of hot water should therefore bring some pain relief. This step cannot be sufficiently stressed of its importance. The wound and surrounding area should be immersed in water as hot as the victim can stand (but NOT boiling water, and tested on non-injured body area) for about 30 to 90 minutes. Water should be no hotter than 45 degrees Celsius (114 degrees Fahrenheit) in order to prevent scalding and other heat related injuries.
5. CONTACT SECURITY *8111 OR CALL 911.
6. Monitor circulation, airway and breathing.
7. Go to the nearest healthcare facility. A responsible person should accompany the victim to a healthcare facility and report: the approximate amount of time that has transpired from since the victim was envenomed; the exact nature of the first aid that was administered (including type and dosages of over-the-counter painkillers, if taken); and, whether or not the victim slowly ascended from depth underwater and adhered to the rules pertaining to planned if applicable.

safety/decompression stops. All of this information may be important in treating the victim.

g. Safe practices in field /wildlife studies

Field work presents potential occupational health and safety hazards such as disease transmission and trauma related to conflict with wildlife. General field safety procedures include:

- Understand the hazards and follow safety precautions described to you by your course instructors, academic advisors, etc.
- Notify course instructors, academic advisors, etc. of any disability or medical condition that may impact your safety
- Carry first aid and antiseptic kits, allergy medication
- Use field PPE such as long pants and sleeves, close-toed shoes, sturdy gloves
- Make sure immunizations are current
- Carry identification with allergy information
- Immediately report any accident, injury, or illness

For additional information, see the following manual designed by the National Park Service as a guide for field staff to help prevent zoonotic disease exposure. https://www.nps.gov/subjects/healthandsafety/zoonotic-diseases.htm