# AUBURN UNIVERSITY OCCUPATIONAL HEALTH AND SAFETY IN THE ANIMAL CARE AND USE PROGRAM

### Purpose

The purpose of an occupational health and safety program (OHSP) is to reduce to an acceptable level the risk/hazard associated with use of vertebrate animals in research, teaching and outreach, consistent with an overall institutional focus on maintaining a safe and healthy workplace. [Explanation of terms: **risk**- probability that harm, injury, or disease will occur in the on-the-job setting; **hazard**- a recognized risk].

An OHSP for employees and students involved in animal care and use is an important component of the institution's overall animal care and use program. Topics addressed include: risk assessment; personnel training; standard operating procedures; facilities; medical evaluation; and preventive medicine. Health and safety needs are addressed in the context of existing environmental health and safety programs at Auburn University (AU), e.g., blood-borne pathogens, chemical hygiene, respiratory protection, handling/disposal of hazardous waste materials, radiological safety, biological use authorization, and containment and handling requirements for biological agents.

## **Compliance Standards**

Auburn University is required to have an OHSP to be in compliance with Public Health Service (PHS) policy and with federal regulations (e.g. Animal Welfare Act) implemented by the Animal and Plant Health Inspection Service (APHIS), United States Department of Agriculture (USDA). Resource materials for requirements and/or recommendations pertaining to OHSPs include: *Guide for the Care and Use of Laboratory Animals* (National Research Council, 1996); *Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching* (Federation of Animal Science Societies, 1999);and *Occupational Health and Safety in the Care and Use of Research Animals* (National Research Council, 1997). A description of our OHSP must be included in the AU Assurance of Compliance that is required by the PHS. The effectiveness of AU's OHSP ultimately relies on effective interactions among several institutional functions or activities (e.g. research and teaching program directors/Institutional Animal Care and Use Committee (IACUC)/providers of veterinary care/Department of Risk Management and Safety(DRMS)/medical services/ facility-maintenance personnel/administrative support) and on performance of safe practices by all personnel in contact with animals or animal tissues.

## **Participants**

- Those involved in the direct care of animals (including part-time employees)
- Research investigators and their technical staff
- Instructors
- Students having animal contact through research projects
- Others having direct contact with animal tissue, fluids or wastes
- Relevant personnel involved in facilities maintenance, custodial services, security
- Some visitors

Auburn University personnel, including certain students and temporary service employees, are placed into one or more categories (see below) with regard to animal care and use. Placement into these categories is done to facilitate personnel training and participation in the OHSP with regard to animal care and use.

Category	Exposure to Animal Species at Work
1	Rodents, rabbits, other small mammals
2	Dogs, cats
3	Cattle, sheep, other domesticated ruminants
4	Swine
5	Horses
6	Poultry
7	Fish
8	Pet birds, wild birds, raptors, ratites
9	Reptiles, amphibians
10	Bats
11	Wildlife
12	Other
13	Animal contact limited to dead animals
14	Animal contact limited to blood, fluid or tissue in a research or
	diagnostic laboratory
15	Animal contact limited to environmental exposure (e.g. maintenance, custodial or security personnel)
16	No contact expected (no formal training or occupational program required)

The OHSP is provided for all personnel involved in activities applicable to the Auburn University Assurance of Compliance with the PHS Policy on Humane Care and Use of Laboratory Animals. Applicable in the University's Assurance of Compliance are all research, research training, experimentation, biological testing and related activities involving live, vertebrate animals wherein the activities either are supported by the PHS or are not supported by the PHS but the animals are housed in the same facility as PHS-supported animals. Enrollment in the OHSP applies to all workers who contact research animals for which there is increased risk of animal related injury or illness. An employee or student is at "increased risk" if they are exposed to live, vertebrate animals in a way that gives them an increased risk of an occupational illness, such as a zoonotic disease, physical injury, or allergy. At the time of enrollment, all participants will be provided a health questionnaire (History and Risk Assessment Survey). Completed questionnaires will be reviewed by the occupational health physician (OHP). The questionnaire deals with anticipated or actual exposure to animals at work, immunization status with regard to rabies and tetanus, and any existing medical condition that creates an animal contact health risk. Physical examinations and counseling are based on the functional requirements of the position, the type of animal contact, and the individuals' prior medical history.

After completion of the medical evaluation, the OHP notifies:

- the PI, director, or supervisor in a timely manner regarding approval, disapproval or accommodations required for the individual to work with the animal species specified on the enrollment form.
- enrollees of medical follow-ups.
- PIs, directors, or supervisors of annual health reviews or surveillance recalls, e.g. tetanus

#### booster, rabies antibody titer. (Medical records are maintained by the OHP.)

Certain animal contact/projects pose little health risk to individuals and may be exempted from the program. Exemptions may be given for projects that involve the observation of animals or for other uses that pose no increased risk. Questions or interpretations concerning potential exemptions should be directed to the Director of Animal Resources. Students who are only exposed to animals in a classroom setting are not required to enroll in the OHSP.

Other than PHS-related activities, all personnel involved in animal-related research activities in colleges or schools which are accredited, or are striving to become accredited, by the Association for Assessment and Accreditation of Laboratory Animal Care, International (AAALAC) should be enrolled in the OHSP.

Other units (colleges, schools, institutes, centers, academic departments, principal investigator [PI]directed research programs) involved in animal-related activities may choose to participate in the OSHP; the arrangement for participation may be initiated by contacting the Director of Animal Resources.

Aside from the OHSP per se, oversight of occupational health and safety issues is provided by the IACUC, Institutional Biosafety Committee, and DRMS. The IACUC, for example, requires certification by PIs/facility contacts that all individuals working with animals, animal tissues, or animal products on an approved protocol be informed of relevant occupational health and safety issues prior to performing their duties. Moreover, occupational health and safety issues are topics for consideration by the IACUC in its semiannual site inspections and programmatic reviews.

The effectiveness of AU's OHS program ultimately relies on effective interactions among several institutional functions or activities; e.g. research and teaching program directors; IACUC; providers of veterinary care; risk management and safety program; medical services; facility-maintenance personnel and administrative support. Essential to effectiveness, of course, is a continuing performance of safe practices by all personnel in contact with animals or animal tissues.

### **Administrative and Programmatic Support**

• Auburn University Central Administration

AU Central Administration provides the resources to support essential elements of the OHSP infrastructure: administrative oversight via the Office of the Vice President for Research (OVPR); salary dollars for the relevant administrative personnel in the DRMS, Office of Animal Resources (OAR), and OVPR; and the computer network for information management/exchange, including on-line access to relevant health and safety information.

Costs associated with the OHSP are the responsibility of PIs and/or the employing units. Requests to help cover costs may be considered by the OVPR.

• Department of Risk Management and Safety

Responsibilities of DRMS include: conducting safety training in chemical hygiene/laboratory safety, chemical waste management, radiological safety, medical waste management, blood borne pathogens, respiratory protection, and hearing conservation; participation in entry training by making available core

materials/information via videotapes, web-based training, etc.; participation in any required annual training by notification of personnel and coordination of activities; oversight and record keeping pertaining to training activities; site inspections and/or other issues pertaining to compliance and enforcement in OHSP; participation in certain aspects of the medical monitoring program, e.g., identifying need for auditory testing and/or respiratory protection and assessment of exposure to radiation; record keeping and investigations with regard to accidents/injuries/adverse incidents; and providing consultation to participants or employing units on topics such as ventilation, ergonomics, storage of hazardous materials, and engineering controls (e.g., biological safety cabinets).

• The Occupational Health Physician (OHP)

The OHP provides medical services and counseling associated with entry medical evaluation and surveillance recalls (e.g., annual reviews, tetanus boosters, rabies antibody titers). With entry evaluations, the OHP will notify the PI, director or supervisor in a timely manner when the medical evaluation and procedures have been completed and will indicate in the notification approval, non-approval or accommodations required for enrollees to work with the animal species specified in Part I of the History and Risk Assessment Survey. The OHP is responsible for notifying enrollees of medical follow-ups or surveillance recalls. Records documenting status of entry medical evaluations and surveillance recalls are maintained by the OHP.

• Office of Animal Resources (OAR)

The Director of Animal Resources provides consultation to researchers, instructors, students, and staff on matters relating to occupational health and safety. The Director also may investigate or oversee investigation of accidents or incidents involving occupational health and safety to determine probable cause and/or the extent of compliance with IACUC and animal care and use guidelines. The OAR website contains material and linkages pertaining to entry and annual training on occupational health and safety issues.

• Institutional Animal Care and Use Committee (IACUC)

All live vertebrate animal work conducted by AU faculty, either at on-campus or outlying sites, must be approved by the IACUC. Moreover, the OHSP as a component of the animal care and use program is included in the IACUC's semiannual program reviews.

• Institutional Biosafety Committee (IBC)

The IBC is charged by the President of AU with responsibility for the regulation of biohazardous materials, including human and animal pathogens, plant pathogens, toxins, allergens and recombinant DNA. PIs using biohazardous materials within AU facilities must receive authorization for biological use from the IBC. The AU Biosafety Program, under the auspices of the IBC, is heavily dependent on the PI to ensure the safety of students, faculty and staff, visitors, and the environment.

• Radiological Safety Committee (RSC)

All work with radioisotopes conducted at AU must be approved by the RSC.

• Other AU safety programs applicable to laboratories that work with biological agents include the Chemical Hygiene Plan, the AU Chemical Waste Management Program, Blood-Borne Pathogens, and Respiratory Protection. These plans and the AU Biological Safety Manual are available as paper copies or online (<u>http://www.auburn.edu/administration/safety/)</u>.

# Hazard Identification and Risk Assessment

Risk assessment shall entail consideration of the following factors: animal contact; exposure intensity; exposure frequency; physical and biological hazards presented by the animal; hazardous properties of the agents used in the research protocols; susceptibility of the employee; occupational-health history of employees doing similar work; and hazard-control measures available. The University recognizes that hazard identification/risk assessment must be a continuing process in each animal use unit. Moreover, these aspects will be reviewed as part of semiannual inspections of facilities by IACUC and will be evaluated at least annually via inspections conducted by DRMS. Reports detailing deficiencies observed/detected during inspections are sent to animal care unit supervisors and/or directors, Director of Animal Resources, and appropriate academic department heads, directors, and deans. Included in these reports are action plans/recommendations with regard to prompt corrective action.

Potential Risk of	Due to	Examples
Back Injury	Lifting Pushing Twisting Falling	feed bags cage racks restraining large animals slip on wet floor
Hearing Loss	Noise	cage wash areas, dog runs
Electrical Shock	Faulty electrical wiring	water on floor, ungrounded equipment
Puncture Wound	Bite or scratch	unrestrained animal
Needle stick	Injecting, obtaining blood	improper sharps disposal
Exposure	Allergens	animal hair, dander, serum, animal proteins
	Biohazards	human pathogens, zoonotic agents, latent or introduced
	Chemicals	hazardous materials on test, cleaning or decontaminating materials, acids for cage washing activities
	Radiation	research isotopes, X-ray equipment

Examples of Selected Hazards in Animal Facilities

### **Education and Training**

Training is provided at entry into the animal care and use program and at least annually thereafter. Topics to be addressed will include, but are not limited to: institutional/unit policy on occupational health; relevant hazards and control strategies pertaining to general work assignments (e.g., zoonoses, chemicals, radiation, allergies, physical hazards, handling of waste materials, work practices, personal hygiene); making available informational hand-outs on topical matters; points of contact for additional information; and unit inspection standards. Involved in training are one or more employees in the respective animal care and use units, professionals from DRMS, animal health veterinarians, and scientists. Informative links on occupational health and safety issues (e.g., zoonoses) are available at the OAR (www.auburn.edu/research/vpr/animals/ index.htm) or Division of Laboratory Animal Health (DLAH) (http://www.vetmed.auburn.edu/lah/trainingresources.html/) websites. Record keeping/training records are kept at the unit level, and safety training and when). Assessment of the education and training program will be provided by IACUC at semiannual intervals.

#### Serum-banking

Serum-banking is the collection and frozen storage of serum samples drawn from employees who might be at risk for occupationally acquired infection with the agent under study and for which methods are available to measure immunologic response to the agent. Samples are obtained by the OHP, upon request by a PI who is studying a known or potential zoonotic pathogen. Testing of the sample is conducted at each collection and the results communicated to the employee. Participation in serum-banking includes informed consent of employees or students, and they may elect not to participate. Any specimen, once collected, is property of Auburn University and is for the sole purpose of institutional surveillance and not for individual health care.

#### Immunizations

- Tetanus prophylaxis: Every employee should have up-to-date tetanus immunizations. Consistent with recommendations by the Public Health Service Advisory Committee on Immunization Practices (ACIP), the AU OHSP recommends immunization against tetanus every 10 years for everyone, and immunization also is recommended if a particularly tetanus-prone injury occurs in an employee in which more than 5 years have elapsed since the last immunization.
- Prophylactic vaccination should be considered when research is being conducted on infectious diseases for which effective vaccines are available.
- Rabies: Anyone having exposure, or suspected exposure, to a rabies-positive animal or tissues; or contact from a suspect animal that cannot be tested, or quarantined, for rabies may be required to undergo post-exposure prophylaxis therapy.

It is the responsibility of instructors/principal investigators to monitor the risk of personnel and obtain the appropriate immunizations for them BEFORE exposure occurs. If there is any question as to whether someone should be immunized, contact the occupational health physician.

Risk	Nature of Risk	Populations	Pre-exposure regimen
Continuous	Virus present continuously, often in high concentrations. Aerosol, mucous membrane, bite, or non- exposure possible. Specific exposure may go unrecognized.	Rabies research lab workers. Persons whose activities bring them into frequent contact with potentially rabid animals such as: cats, dogs, skunks, bats, raccoons, and foxes. Persons frequenting bat caves/enclosures.	Primary pre-exposure immunization course. Serology every 6 months. Booster if titer falls below acceptable level.
Frequent	Exposure usually episodic with source recognized, but exposure may also be unrecognized. Aerosol, mucous membrane, bite, or non-bite exposure.	Diagnostic lab workers?, spelunkers, veterinarians, and persons visiting foreign areas of enzootic rabies for more than 30 days. Also persons whose activities may potentially bring them into contact with rabid animals or work in rabies epizootic areas. <sup>a</sup> Examples: wildlife, ecology, mammalogy, biology, veterinary science, animal science, and other related fields. University Animal care employees.	Primary pre-exposure immunization course. Serology every year or every 2 years <sup>b</sup> .
Infrequent	Exposure nearly always episodic with source recognized. Mucous membrane, bite, or non- bite exposure.	Those working in areas of low rabies enzooticity. Persons not intending to contact wild animals or stray animals, those observing only.	Primary pre-exposure immunization course. Serology every 2 years <sup>b</sup> .
Rare	Exposure always episodic, mucous membrane or bite with source recognized.	U.S. population at large, students at large.	No pre-exposure immunization necessary.

Recommendations Regarding Rabies Immunizations

? Judgment of relative risk and extra monitoring of immunization status of laboratory workers is the primary responsibility of the laboratory supervisor.

<sup>a</sup>Individuals with exposure to bats, skunks, raccoons, and foxes are at higher risk. <sup>b</sup>Boost if endpoint value is  $\leq 0.5$  IU/ml or the reciprocal of the titer is < 1.5. Zoonoses (selected examples)

- Rabies (see above)
- Toxoplasmosis

Unless proof of titer is provided, toxoplasma antibody titers will be determined on all females of childbearing capacity who have work-related contact with random-source cats or their feces at Auburn University. A titer of <1:16 by immunofluorescent testing is indicative of the absence of immunity. Females of childbearing capacity who lack immunity and work with cats will be informed of their susceptibility and provided additional educational information on toxoplasmosis. Her supervisor will be advised to arrange a temporary job re-assignment while a susceptible employee is pregnant.

• Q fever

Employees at risk of exposure to Q fever include those who handle or use products of pregnancy or parturition (placenta, amniotic fluid, blood, soiled bedding) from cattle, sheep or goats. Employees with valvular or congenital heart defects or those who are receiving immunosuppressant drugs should not work with infected animals at the time of animal parturition. Moreover, it is best for these individuals not to work with cattle, sheep and goats at all.

• Ringworm (Dermatomycoses)

The skin lesion of ringworm, caused by a fungus, usually spreads in a circular pattern from the original point of infection, giving rise to the term "ringworm." The clinical disease consists of small, scaly, grayish patches with broken hairs and with itching. Transmission is by direct contact with an infected animal. A complicating factor is that cats and rabbits may be asymptomatic carriers of the fungus.

Psittacosis

Psittacosis infection is common (1-20% of birds affected) in wild bird populations, but particularly so in pigeons and in birds of the parrot family. Most infections in birds are unapparent. The infection is spread from bird to bird and from bird to human beings via aerosols, so direct contact with an infected bird is not necessary. One to two weeks after exposure, an infected human may develop a respiratory illness of varying severity. A mild case will appear to be the flu, while more severe cases can result in chills, fever, sweating, headaches and even pneumonia. The disease is readily treated with tetracycline-type antibiotics.

An employee working with a stable, on-campus colony of known negative animals is at minimal risk. A worker dealing with sick pet birds at a teaching hospital or with newly obtained birds of unknown health status is at moderate risk. Working in a dusty environment with high densities of birds is a much greater risk than working with birds outdoors or in clean, well-ventilated areas.

### **Assessment of Physical Condition**

- Lifting: Certain prospective employees in animal facilities (e.g. care providers, cage wash personnel) are required to pass a physical movement exam unless a reasonable accommodation can be made. This exam, conducted by the OHP, may consist of range of motion analysis and repeated lifting of 10 pounds above shoulder height and 50 pounds above belt height. Proper back and lifting training will be provided for new employees and on an on-going basis for existing employees.
- Hearing: Personnel working in high noise areas (e.g. cage washer, dog care providers, farm machinery) will be required to have a base line and an annual auditory examination to assist with hearing conservation. Protective devices will be provided and worn.

### **Bites and scratches**

Most animals are capable of inflicting bites or scratches. 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.

The bacteriology of bite wounds reflects the animals' oral flora. With dog or cat bites, bacteria that may be involved in infection of bite wounds include *Pasteurella multocida, Staphylococcus aureus, S. intermedius*,  $\alpha$ -hemolytic streptococci, and *Capnocytophaga canimorsus*. For example, in patients with impaired immune systems who have been bitten or scratched by dogs or cats, *Capnocytophaga* infection may cause (in addition to cellulitis) fever, septicemia, meningitis, endocarditis or arthritis.

An accident report must be filed with the University.

## Allergies

Allergy to animal materials (proteins derived from hair, dander, urine, saliva, or fecal matter) is one of the more important occupational problems occurring in workers exposed to animals. Allergies can be manifest in a number of ways, including: allergic rhinitis (characterized by runny nose and sneezing similar to hay fever); allergic conjunctivitis (irritation and tearing of the eyes); asthma; atopic dermatitis (skin condition

caused by exposure to a substance to which an individual is allergic); or anaphylaxis (symptoms may include itching/hives, throat tightness, eye or lip swelling, difficulty in swallowing, hoarseness, shortness of breath, dizziness, fainting, nausea, vomiting, diarrhea). Allergy to animals is particularly common in workers exposed to animals such as cats, rabbits, mice, rats, gerbils, and guinea pigs.

Studies show that 15 to 20% of workers exposed to animals will develop symptoms of allergy. Most reactions are of the allergic rhinitis and allergic conjunctivitis type. People who have a prior personal history or family history of hay fever or eczema will be more likely to develop asthma after contact with animals (but apparently not more likely to develop rhinitis and conjunctivitis). Symptoms can develop from months to years after a person begins working with animals. However, a majority of the individuals who are going to develop symptoms will do so within the first year of animal contact. Although rare and despite the best preventive techniques, it may be that an allergy is so severe that a person is forced to change jobs.

Certain procedures should be followed routinely in efforts to prevent or control the development and symptoms of animal allergy. Work with animals should be done in well-ventilated areas. Workers may wear gloves to reduce direct exposure to the animals. To address the risk of inhalation or contaminated material, cages should be changed frequently, and masks should be worn during the changing of cages. Symptoms of allergies may be controlled with the increased use of masks while working with the animals, and possibly with medication. Desensitization therapy (allergy shots) has been successful for some individuals.

Prospective employees in animal care facilities will be queried on allergy risk with regard to a history of pre-existing asthma, seasonal rhinitis or conjunctivitis, or eczema. Allergy testing will be provided at the discretion of the OHP and with the employee's consent.

# **Personal Hygiene**

There are a number of personal hygiene issues which apply to all workers who are exposed to animals. These include:

- There should be no eating, drinking, smoking or applying of cosmetics in areas where animals are housed or used.
- Laboratory coats, gowns or uniforms should be worn when working with animals, but should be removed before leaving the facility.
- Careful hand washing should be done after handling of animals.
- Certain infections are transmitted from animals to humans primarily by contaminating hands with animal feces or urine and then putting contaminated objects into the mouth. Examples of organisms utilizing this mode of transmission are Salmonella spp. and Cryptosporidium. Every precaution should be taken to avoid this mode of transmission by alertness and careful personal hygiene. Additional health problems are encountered when these organisms are carried home and children/infants are exposed.

## **Implementation of the OHSP**

#### **Enrollment:**

- Responsibility of directors of animal facilities (e.g., director or director's designee in DLAH); directors or supervisors of operational units (e.g., necropsy laboratory); and research (PIs). To be enrolled are professional staff, technical staff, graduate students and/or student employees whose professional activities, work responsibilities, and/or graduate or postgraduate course of study involves contact with vertebrate animals to the extent of creating an increased risk of animal-related injury or illness.
- Enrollment is initiated at the unit level and/or by PIs for current employees at the time of OHSP phase-in and for new employees at the time of hire. Passing a pre-placement health evaluation may be a condition of employment for individuals with animal contact required as part of their job description. (For new hires, the job description should include a statement to the effect that employment may be contingent upon the results of a medical assessment conducted by the OHP).

- Participants will be formally enrolled by completing a standard form (questionnaire History and Risk Assessment Survey) that addresses risk assessment and medical history pertaining to animal contact. Forms can be obtained from the hiring department/unit.
- The forms are divided into parts I and II. The director, supervisor or PI will provide assistance as needed in filling out Part I and will sign Part I upon completion, attesting to accuracy of information regarding animal contact. The director, supervisor or PI will request that enrollees schedule an appointment with the OHP and that the enrollees provide to the OHP at the scheduled appointment their History and Risk Assessment Survey, with Parts I and II completed to the fullest extent possible.
- The enrollee will schedule an appointment with the OHP for a medical evaluation and for receipt of other procedures and services based on the risk assessment and medical history (e.g. immunizations, assessment of physical conditioning).

The OHP will notify the PI, director or supervisor in a timely manner when the medical evaluation and procedures have been completed. Indicated in the notification will be approval, non-approval, or accommodations required for the individual to work with the animal species specified in Part I of the questionnaire.

• Records documenting status of entry medical evaluation and recommendations regarding surveillance recall schedules (e.g. annual reviews, rabies antibody titer, tetanus booster) will be prepared and maintained by the OHP. The OHP will be responsible for notifying enrollees of medical follow-ups and surveillance recalls. The OHP will notify the PI, director or supervisor regarding the individual's participation or non-participation in the surveillance recall within one month after the enrollee had been notified of the recall.

# **Entry Training**

Entry training will be provided via:

- core materials/information made available by DRMS (e.g., videotapes, web-based training on topics such as handling of waste materials, chemical hygiene, exposure control, reporting of work-related injuries and illnesses, institutional policy on occupational health and safety, linkage to Auburn University Biological Safety Manual)
- links at the DLAH and OAR websites on occupational health and safety issues
- employing units on relevant hazards and control strategies pertaining to the individual's work assignments (e.g., zoonoses, chemicals, radiation, allergies, physical hazards, work practices), unit policy on occupational health, and points of contact for additional information. Record keeping on training will be kept at the unit level, and safety training records also will be maintained by DRMS for purposes of oversight (e.g., who needs what training and when). Written acknowledgement of training will be required of each person.

The director, supervisor, or PI will provide enrollees with a list of required training and may specify assignments to be completed during the standard probationary period for new hires.

### **Annual Training**

• Safety training will be under the auspices of the DRMS and the PI. Topics presented as employee information will include updates on the topics referenced under entry training. Per entry training, written acknowledgement of training will be required.

#### **Medical Monitoring Program**

• Components of an individual's medical monitoring program will reflect the specific surveillance needs of the participant based on real or potential exposure to specific species of animals. (See list of animal species under question 1 on the questionnaire "History and Risk Assessment Survey.")

PROCEDURES	GUIDELINES/REQUIREMENTS		
Allergy risk counseling	All employees with animal contact		
Tetanus immunization	All employees with animal contact when more than 10 years from immunization or booster, or date of immunization/ booster not documented		
Rabies immunization	All employees exposed to bats, unvaccinated carnivores, or other potentially high risk species, e.g., raccoon, skunk, fox		
Q-fever counseling	All employees who have contact with pregnant sheep or goats or who have direct contact with the organism <u>Coxiella</u> <u>burnetti</u> in a research laboratory		
Toxoplasmosis counseling	All female employees of childbearing age who have work- related contact with random-source cats		
Physical examination pre-placement	Requirement for a physical examination and components of the examination are based on factors such as position responsibilities and the individual's prior medical history.		
Physical movement examination (Range of motion analyses and lifting exercises)	Requirements are based on position responsibilities and/or judgment of the physician.		
Blood drawn for serum banking	May be a requirement for employees who will be exposed to animals experimentally infected with a known zoonotic agent or who will be potentially exposed to the zoonotic agent in a laboratory setting via preparations containing the agent, e.g., inocula, animal tissues/fluids, etc.		

Auditory testing	Need will be identified by DRMS and testing administered by the OHP.
Respiratory protection	Need will be identified by DRMS and testing administered by the OHP.
Protection from exposure to radiation	Need identified by PI. All personnel caring for/exposed to animals treated with radioisotopes will be issued a radiation film badge by DRMS to monitor external exposures.
	Each individual issued the film badge is responsible for appropriate wearing of the badge and for surrendering the badge to DRMS for assessment according to established testing procedures.

Completion of a risk assessment survey by OHSP enrollees is required at 12-month intervals. Notices for annual reviews are sent to PIs, directors, or supervisors by the occupational health physician. The occupational health physician reviews the enrollee's responses and notifies the enrollee if an appointment needs to be scheduled. Enrollees should contact the occupational health physician or DRMS if they have any questions.

## Duty/Site Surveillance of Work-related Injuries or Illnesses

- Injury log: Every animal holding facility and animal research laboratory will maintain an injury log to include the following: date, time and type of injury; date of employee referral for treatment.
- Reporting work/school-related injuries: Employees and students shall promptly report all work-related injuries and illnesses to their immediate supervisors for instructions on procedures for obtaining first aid or medical treatment. The injured/ill employee or student should report their claim to the Department of Risk Management and Safety (DRMS) within 3 working days of a major incident or within 5 working days of a minor incident, per procedures established by DRMS.

## **Provision for Treating Injuries and Illnesses**

- Weekdays between 8:00 a.m. and 4:45 p.m.: Auburn University Medical Clinic, 400 Lem Morrison Drive, Auburn
- After work hours: East Alabama Medical Center (EAMC) emergency room,

2000 Pepperell Parkway, Opelika

• Anytime, if immediately life-threatening: EAMC emergency room