Title: Animal Care and Use Occupational Health Program

I. Purpose:

To establish the Occupational Health policy for the Animal Care and Use Program. This policy is intended to provide guidance for all persons who are listed on an Animal Care and Use Protocol and/or work with live, vertebrate animals.

II. Policy:

All employees, students, volunteers, visiting researchers, and non-UC collaborators who are listed on an approved Animal Care and Use Protocol and/or work with live, vertebrate animals in research or teaching are required to participate, as detailed below, in the UC Davis Animal Care and Use Occupational Health Program.

All individuals (including the Principal Investigator, PI) listed on an Animal Care and Use Protocol must be cleared through Occupational Health Services either on the Davis campus or on the Sacramento campus. For Davis campus employees, clearance can be obtained in the Occupational Health Surveillance System (OHSS) PRIOR to initiating any work with animals. If health services are performed at UC Davis Health in Sacramento, Student Health Services, or an outside provider, please upload the records into the recommendation section of the OHSS or provide by fax to the Davis campus Occupational Health Center at 530-752-5277.

III. Procedures:

A. Initial Medical Assessment Process

1. The PI, Supervisor, or designee will fill out and submit a Risk Assessment form electronically in the OHSS, documenting the work environment for each individual listed on the Animal Care and Use Protocol. Sometimes the PI and participant are the same person; in this case both the participant and the PI steps will need to be completed by the PI. The Risk Assessment includes information on risks within the work environment including the following:
• The functional demands and environmental factors associated with the work to be performed
• The potential animal exposures
• Other potential work-site health and safety hazards (i.e., biological, chemical agents, blood borne pathogens)

2. The participant reviews the Risk Assessment and accepts or rejects if changes are needed.

3. After accepting the Risk Assessment, the participant fills out the confidential Health Questionnaire and submits for review by a UC Davis medical professional at Occupational Health or as designated on the form. Do not send personal medical information to IACUC staff or your supervisor.

4. The UC Davis Occupational Health medical professional reviews the participant’s Risk Assessment and Health Questionnaire and sends the participant an e-mail with a link to their Medical Assessment.

5. The participant logs on to the OHSS site and reviews/acknowledges the Medical Assessment. If there are questions from the medical professional on either the Health Questionnaire or Risk Assessment, or recommendations requiring follow-up, the participant will need to respond to the questions or contact Occupational Health Services for an appointment at 530-752-6051 to complete the process.

6. The IACUC system will be updated once steps 1-5 are complete and required in person appointments or procedures have been cleared. The review process may take several working days. In some cases, consultation with a UC Davis Occupational Health Services medical professional or medical services (i.e., TB testing, respirator clearance, vaccinations) may be required prior to obtaining clearance to enter certain facilities. Either the participant or the person who filled out the Risk Assessment may make the appointments required for testing. A Request for Service document may need to be sent before the appointment can be made with Occupational Health Services.

7. Individual facilities may have additional Occupational Health requirements for entry. Examples include, but are not limited to, the following:
   • Nonhuman primate facilities
   • BSL-3 facilities
   • Shriner’s Hospital

B. On-going Assessments
1. The need for additional reviews, evaluations, and services will be determined by the Occupational Health Services medical professional in conjunction with the departmental requirements, based on risk and health history and may range from 1-5 years.

2. The PI is responsible for updating the risk assessment in a timely manner if there are changes in work assignments (i.e., change in species, contact levels, location) for participants.

3. Individuals listed on approved Animal Care and Use Protocols are responsible for updating their personal health records.

4. A new risk assessment must be created when there is a change in PI or supervisor, to ensure the automated renewal notifications are sent to the correct individual.

C. Tracking

The IACUC Office is responsible for verifying that individual(s) listed on a protocol have complied with the Occupational Health Program requirements. Completion dates are provided to the IACUC Office via a nightly feed provided by the OHSS.

D. Training

Individuals listed on an Animal Care and Use Protocol will be provided access to information regarding the following:

- The availability of medical evaluations and treatment
- The value of universal precautions and personal hygiene
- Information regarding allergic reactions and relevant zoonoses based on their particular animal exposures
- Reproductive health information

IV. Students in Classes:

A. As part of the submission of an Animal Care and Use Protocol for teaching, the instructor will complete the Exposure Assessment form, which they will send to a Student Health and Wellness Center medical professional for review and risk category assessment.
1. The Exposure Assessment form will include a brief description of the class, the species involved, and a description of student contact with the animals.

2. If a course is determined to be a High Risk (high probability of an adverse health effect, for example, students working with wild-caught mammals or involved with lambing), the instructor MUST consult with a Student Health and Wellness Center medical professional to determine if a visit by the medical professional to the class during the first week of the quarter is needed. The medical professional will briefly discuss with the class the potential hazards, zoonoses and the option for the students to engage in an individual medical assessment.

3. Risk categories:
   - **High Risk** – High probability of an adverse health effect, for example: students working with wild-caught mammals or involved with lambing.
   - **Low Risk** – Low to moderate probability of adverse health effects.

B. Each PI or instructor overseeing courses involving animals, Variable-Unit courses, or independent study courses that include live, vertebrate animals, must provide enrolled students with the following information:
   - The availability of and the option to request medical evaluations and treatment.
   - Hand-outs (below):
     - General Information: Potential Hazards (zoonoses, allergies and injuries)
     - Universal Precautions and Personal Hygiene
   - Other potential health and safety hazards or biohazards.
   - With link to the Zoonosis Information by Species
   - The instructor will also advise students to contact the Student Health and Wellness Center for consultation if they are pregnant, immunocompromised, diabetic, have a history of allergies, or other significant medical conditions.

C. Veterinary students must complete the Medical Entrance Requirements for the School of Veterinary Medicine.

D. Other facilities may have additional Occupational Health requirements for entry. Examples include, but are not limited to, the following:
   - Nonhuman primate facilities
   - BSL-3 facilities
   - Shriner’s Hospital
V. **Temporary Affiliates (TAFs):** Visiting researchers and non-UC Davis collaborators.

A. TAFs include individuals who are listed on an Animal Care and Use Protocol and/or work with live, vertebrate animals used in research or teaching and who are **NOT** UC Davis employees or students.

B. The Temporary Affiliate has the option of receiving a medical evaluation by going through the OHSS process or receiving information pertinent to the protocol they are working on from the PI. The information provided must be documented. The information provided will include, but is not limited to the following:

- The availability of and the option to request medical evaluations from Occupational Health.
- Hand-outs (below):
  - *General Information: Potential Hazards (zoonoses, allergies and injuries)*
  - *Universal Precautions and Personal Hygiene*
- Other potential work-site health and safety hazards.
- The link to the [Hazard Analysis Tool](#)
- Advice to contact their personal health care provider for consultation if they have concerns based on the medical evaluation provided by Occupational Health Services. Persons who are pregnant, immunocompromised, diabetic, have a history of allergies, or other significant medical conditions should contact their personal healthcare provider for a consultation prior to working with animals.

C. Non-UC Davis Collaborators may submit an [Exemption Form](#) verifying that they participate in their AAALAC Accredited home institution’s Occupational Health program as long as the individual is working under a protocol at their home institution and has clearance working with the same species. Individuals from non-accredited organizations or who are not cleared for the same species at their home institution will need to arrange clearance through the PI they are working under at UC Davis (see B. Above).

D. Individual facilities may have additional Occupational Health requirements for entry. Examples include, but are not limited to, the following:

- Nonhuman primate facilities
- BSL-3 facilities
- Shriner’s Hospital

VI. **Volunteers:**
A. This includes individuals **NOT** listed on an Animal Care and Use Protocol and who are **NOT** UC Davis employees or students, but they **do** work with live, vertebrate animals.

B. The volunteer has the option of receiving a medical evaluation by going through the OHSS process or the PI or Facility Manager will provide each individual with information pertinent to the species/protocol on which they are working and document the information has been provided. The information provided will include, but is not limited to, the following:

- The availability of and the option to request medical evaluations from Occupational Health Services.
- Hand-outs (below):
  - *General Information: Potential Hazards (zoonoses, allergies and injuries)*
  - *Universal Precautions and Personal Hygiene*
- Other potential work-site health and safety hazards.
- The link the [Hazard Analysis Tool](#)
- Advice to contact their personal health care provider for consultation if they have concerns based on the medical evaluation provided by Occupational Health Services. Persons that are pregnant, immunocompromised, diabetic, have a history of allergies, or other significant medical conditions should contact their personal healthcare provider for a consultation prior to working with animals.
- Workplace exposures must be reported and treated at Occupational Health Services.

C. Individual facilities may have additional Occupational Health requirements for entry. Examples include, but are not limited to, the following:

- Nonhuman primate facilities
- BSL-3 facilities
- Shriner’s Hospital

### VII. Ancillary Personnel:

A. Ancillary personnel are those employees who **do not** have direct animal contact in their daily job functions, but who may need to enter an animal area or multiuse laboratory in the course of performing their duties and may be exposed to environmental/animal hazards.

B. Ancillary personnel will be provided, by their supervisor or designee, information based on their need for entry into animal care facilities. IACUC staff will provide triennial training to Facilities Management employees and they are available to
provide training to other ancillary groups as needed. This training will include, but is not limited to, the following:

- The availability of and the option to enroll in the online OHS System.
- Hand-outs (below):
  - General Information: Potential Hazards (zoonoses, allergies and injuries)
  - Universal Precautions and Personal Hygiene
- Other potential work-site health and safety hazards.
- Considerations when entering animal areas to prevent cross contamination and promote animal welfare.

C. The link to the Hazard Analysis Tool

D. Individual facilities may have additional Occupational Health requirements for entry and may provide additional training prior to entry. Examples include, but are not limited to, the following:

- Nonhuman primate facilities
- BSL-3 facilities
- Shriner’s Hospital

E. Occupational Health Services may be contacted to provide group training sessions upon request.

VIII. **Resources:**

1. Occupational Health and Safety in the Care and Use of Research Animals
2. UC Davis Policy and Procedure 290-25
3. UC Davis Occupational Health Surveillance System (OHSS)
   https://safetyservices.ucdavis.edu/units/occupational-health/surveillance-system
4. UC Davis Zoonotic Diseases and Risk Assessment
   https://safetyservices.ucdavis.edu/units/occupational-health/surveillance-system/zoonotic-diseases
5. UC Davis Laboratory Hazard Assessment Tool (LHAT)
   https://safetyservices.ucdavis.edu/units/ehs/research/laboratory/lhat
6. TAF Exemption Form
The general hazards associated with contact with animals fall into three categories: zoonoses, allergies, and injuries.

**ZOONOSES**

Zoonoses are diseases of animals that are transmissible to humans. They may present a significant hazard in some situations where animals are used. Fortunately, many laboratory animal species today are bred to be free of zoonoses that were once more common in these animals. However, laboratory and farm animals can be infected with zoonotic agents, some of which can be life-threatening to humans. Field research with wild species remains an important source of exposure to zoonotic agents. Prevention of exposure to these animal-related illnesses requires knowledge of the zoonoses that may be found in the animals with which you will be working. If you are exposed through a bite, scratch, needle stick, aerosol droplet, mucosal secretion, feces or urine, there is the potential for you to become infected. You must notify your Principal Investigator or Instructor and seek medical consultation.

You may be at increased risk for zoonotic infection if you are immune compromised (e.g. taking steroids such as prednisone on a regular basis, diabetic, infected with HIV, autoimmune diseases). If you have questions or concerns about your health status and the risks that you may be exposed to, please make an appointment with your healthcare provider for a health evaluation and to address any questions.

The Hazard Analysis Tool located at [https://safetyservices.ucdavis.edu/units/ehs/research/laboratory/lhat](https://safetyservices.ucdavis.edu/units/ehs/research/laboratory/lhat) and the Public Health Agency of Canada at [http://www.phac-aspc.gc.ca/id-mi/index-eng.php](http://www.phac-aspc.gc.ca/id-mi/index-eng.php) are some sites that are excellent resources regarding zoonotic diseases.

**ALLERGIES**

Some people develop allergies to the animals they work with or to their own pets. The incidence is quite high - some estimate that as many as 15% of people are allergic to some animal species. If you are allergic to a species that you have regular contact with, it can be debilitating. If you suffer from asthma, having contact with a species to which you are allergic can present a significant health risk.

Individuals with allergies may display any of a number of symptoms. These include allergic rhinitis (a condition characterized by runny nose and sneezing similar to hay fever); allergic conjunctivitis (irritation and tearing of the eyes); asthma (characterized by wheezing and shortness of breath), and contact dermatitis (a red, bumpy rash that may appear). If you have a stuffy nose or other respiratory signs, and if it seems to last longer than a common cold (weeks instead of days) then you may be suffering from an
allergy. If you develop suspicious symptoms whenever you are exposed to a particular species, then you may have an animal allergy.

People may be allergic to any animal species. The allergens are proteins that are excreted in the saliva, urine, and from various glands associated with the skin. The proteins tend to be sticky and become associated with the animal's hair and with particles of dander. The allergens are unique to each species of animal, thus it is possible to be allergic to mice and not to rats or vice versa. It is also possible to be allergic to multiple species.

The most effective way to control and prevent allergies is to minimize exposure to the allergens. If you have animal allergies, or think you are at risk of developing such allergies as a result of working with animals, you should make an appointment to discuss your concerns with a healthcare provider and obtain the necessary advice about the best methods you can use to protect yourself.

INJURIES

All animals are capable of inflicting bites and scratches. Small animals, such as rodents and rabbits, usually cause only minor wounds. Larger species like cats, dogs, and nonhuman primates can inflict severe wounds. Bite and scratch wounds can become infected due to the normal bacteria present in the animal's mouth or toenails, or by bacteria that are present on your own skin. To prevent bites and scratches it is important to use proper animal handling techniques. Protective garments, such as gloves, gauntlets, and long-sleeved laboratory coats can be useful in limiting injury to the hands and arms.

When you handle or move large livestock such as horses or cattle, injuries can also result if the animal kicks or if you get pinned between the animal and a building, implement, or other fixed object. The best way to avoid such injuries is to understand animal behavior. Only by knowing what to expect in certain situations can you protect yourself and others from injury.

Your Principal Investigator or Instructor will train you in appropriate animal handling and advise you about appropriate protective clothing. If you are bitten, scratched, or otherwise injured (e.g. needle stick), immediately wash any wounds with soap and water, and immediately inform your Principal Investigator or Instructor about the injury. Call Occupational Health, the Student Health Center, or your health care provider to help you make an informed decision regarding your medical needs.

Occupational Health Services: (530) 752-6051

Student Health and Counseling Services: (530) 752-2300

Institutional Animal Care and Use: (530) 752-2364
Universal Precautions and Personal Hygiene
for
VISITING RESEARCHERS, NON-UC DAVIS COLLABORATORS,
VOLUNTEERS, and STUDENTS

Wash your hands.
Frequent and thorough hand washing is the best way to stop infection. The sooner you wash your hands after an exposure, the less likely you are to spread infection.

The most common way to contract a zoonotic infection is by accidentally placing infectious material in your mouth.

When to Wash Your Hands
- Always wash your hands before and after eating, drinking, smoking, or using the restroom.
- Wash your hands after working with animals.
- Wash your hands after touching an object or surface that is or may be contaminated.
- Wash your hands as soon as you remove your gloves or other personal protective equipment (PPE).

How to Wash Your Hands
- Carefully remove gloves and other PPE before you wash, ensuring you do not touch the contaminated side of the gloves.
- Use a paper towel to turn on faucet. Wet your hands and use plenty of soap. Work up a good lather. Rub your hands well, avoid wiping your hands.
- Clean your whole hand, under your nails, between your fingers, and up to your wrists. Wash for at least 20 seconds out of the water stream.
- Rinse your hands well. Let the water run off your fingertips, not your wrists.
- Use clean paper towels to dry your hands well. Use paper towels to turn off the faucet and open the door in order to avoid contaminating your hands.
Wear Protective Clothing.

Wear the protective clothing determined to be appropriate by your Principal Investigator or Instructor when you are working with animals. In some circumstances, protective clothing will consist of a lab coat; for others it may be a dedicated set of clothing or scrubs. Protective clothing helps ensure that you will not bring potentially contaminated material home with you.

Use Personal Protective Equipment (PPE)

Some type of work requires PPE such as gloves, face shields, masks, respirators, and other required items. Always use PPE as directed and where required.

Seek Medical Attention Promptly.

If you are injured, you must promptly report the accident to your Principal Investigator or Instructor, even if it seems relatively minor. You will then report to Occupational Health (530 752-6051) or Student Health Center (530 752-2300) for evaluation of the injury.

Tell your Healthcare Provider you Work with Animals.

Whenever you are ill, even if you are not certain if the illness is animal related, always report to your healthcare provider any animal contact. Many zoonotic diseases may have flu-like symptoms, and your healthcare provider needs this information to make an accurate diagnosis.

Get the Facts.

All individuals working with animals must review the particular hazards, precautions, and hazard evaluation procedures specific to the species with which you will have contact and the procedures to be performed. If there is something you do not understand, ask your Principal Investigator or Instructor. They are responsible for appropriate training and ensuring that you know how to work safely and effectively.

You must know how to recognize hazard warning signs, how to protect yourself against each recognized hazard, and how to react properly in the event of an emergency. Safety is essential and is everyone's business and responsibility.

Revised 2/17/22
The general hazards associated with contact with animals fall into three categories: zoonoses, allergies, and injuries.

**ZOO NOSES**

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You may be at increased risk for zoonotic infection if you are immune compromised (e.g. taking steroids such as prednisone on a regular basis, diabetic, infected with HIV, autoimmune diseases). If you have questions or concerns about your health status and risks that you may be exposed to, please make an appointment with your healthcare provider for a health evaluation and to address any questions.

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**Occupational Health Services**: (530) 752-6051

**Institutional Animal Care and Use**: (530) 752-2364

Revised 2/17/22
Universal Precautions and Personal Hygiene
for
ANCILLARY PERSONNEL

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