

Title/Subject: **ANIMAL HANDLER HEALTH AND SAFETY PROGRAM**

Applies to: faculty staff students student employees visitors contractors

Effective Date of This Revision: November 1, 2020

Contact for More Information: Office of Laboratory and Field Safety

Board Policy Administrative Policy Procedure Guideline

Background:

It is the policy of Central Michigan University (CMU) to comply with all Federal, State, and local regulations regarding the provision of personnel health programs for individuals who have animal contact.

As discussed in the National Research Council Guide for the Care and Use of Laboratory Animals (National Academy Press), an occupational health and safety program must be a part of the overall animal care and use program and should focus on maintaining a safe and healthy workplace. The program should be based on risk assessment, risk management, personnel training, preventive medicine, and when required, medical treatment.

Policy:

All personnel involved in animal care and/or use shall participate in the university animal handler health and safety program. Supervisors (e.g., department chairs, faculty and other CMU employees or affiliates who have oversight of University employees, students, or other individuals) are responsible for implementing this policy with individuals under their supervision. The Office of Laboratory and Field Safety (OLFS) is responsible for the overall management of the occupational health and safety program for personnel involved in the care and/or use of animals. Individuals with questions regarding this policy should contact the Director of the Office of Laboratory & Field Safety (774-4189).

1. Individuals Covered Under Policy

Participation in this program is mandatory for all employee and non-employee animal handlers at CMU (anyone who has animal contact as defined in section 3). Volunteers, outside contractors, or visiting clients should be apprised of health and safety issues by the appropriate CMU contact person at the animal site. The following considerations should be made for all non-employee animal handlers and employees with incidental contact:

a. Non-CMU Individuals (volunteers, outside contractors, visiting clients)

Non-CMU individuals are required to follow this policy as if they were CMU employees, due to their affiliation with the university. Cost (if any) for participating in this program will be the responsibility of the volunteer, affiliated individual or his/her employer.

b. Students

Classroom instructors will provide students with information about any health considerations relative to the species with which they will be working and will provide them with access to the Animal Handler Health and Safety Program Standard Operating Procedure (SOP). All individuals participating in directed research or volunteer research opportunities in which they have animal contact are covered under this policy. Since level of exposure can vary greatly, risk should be assessed on a case by case basis as described below. It is recommended that students consult with Student Disability Services regarding possible options for accommodations.

c. CMU employees, faculty, and staff

CMU employees, faculty and staff with work related exposure to animals that is not related to teaching, research or outreach activities (e.g. Facilities maintenance) are covered under this policy and will be provided with access

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to the Animal Handler Health and Safety Program SOP and medical surveillance option as described below.

2. Basic Animal Handler Health and Safety Program Components

A risk-based assessment of all persons involved in contact with animals or animal tissues is done to determine their level of participation in the occupational health and safety program. This assessment considers: 1) hazards posed by the animals, 2) hazardous biological, chemical, or physical agents used in the animal activity, and 3) susceptibility of personnel. Initial risk assessments will be conducted following a standard operating procedure for risk assessment. The supervisor or instructor will provide the animal handler with information regarding the risks associated with their laboratory or classroom activity and the tasks that the animal handler will perform. Using the information provided by their supervisor, informational handouts regarding animal allergies and knowledge of their individual susceptibility, the animal handler will complete the initial risk assessment. Based on the extent of exposure and individual susceptibility, the next step may be a review of information provided to CMU's consulting occupational health physician on a completed "Initial Medical Questionnaire for Individuals Who Work with Animals". Under no circumstances will the supervisor direct an animal handler in completing the risk assessment or initial medical questionnaire as these forms will contain protected information. If an animal handler has questions regarding risks or how to complete the form they will contact the Office of Laboratory and Field Safety or the Office of Research Compliance.

Risk-based assessments should be reviewed periodically in the event of any change in hazards, degree of exposure or the susceptibility of personnel. While degree and cost of participation in this program will vary based on an individuals' role within the animal care and use program, all individuals who opt to participate will be provided with medical surveillance services.

3. Definitions

- a. **Animal:** Any live or dead vertebrate animal used or intended for use in research, research training, teaching, experimentation, demonstration, or biological testing or for related purposes.
- b. **Animal Contact:** any contact with animals based on hazard identification and relative risk assessment. Animal contact may be direct or indirect. Indirect contact is contact with animal products or items that have been in contact with animals. Animal products include: unpreserved tissues, blood, excreta, body fluids or discharges, hair, dander etc. Items that could be contaminated include sharps, pens and cages, bedding, clothing, gloves etc.
- c. **Animal Handler:** anyone who has animal contact related to classroom, teaching, research or outreach activities at CMU.
- d. **Animal Facility:** Any and all buildings, rooms, areas, or enclosures, including satellite facilities, used for animal confinement, maintenance, breeding, or experiments inclusive of surgical manipulation. A satellite facility is any containment outside of a core facility or centrally designated or managed area in which animals are housed for more than 12 hours.
- e. **Risk Assessment:** The process by which risks associated with working with animals (such as hazardous biological, chemical, or physical agents; allergens; or zoonoses) are identified.
- f. **Risk Management:** The process by which identified risks are managed through such actions as engineering controls and procedures, education, training, personal protective equipment, zoonosis surveillance or immunization.
- g. **Risk Training and Education:** A program of training and education about areas of risk when working with animals in general or with specific species or conducting specific experiments.
- h. **Supervisors:** Department chairs, faculty, and other CMU employees or affiliates who have oversight of University employees, students, or other individuals and who are involved with animals; those individuals who are not CMU employees but are affiliated through courtesy or adjunct appointments may serve as supervisors.

4. Hazard Identification and Risk Assessment

Hazard identification and risk assessment is a dynamic, ongoing process performed throughout the animal care and use program by a range of personnel and committees. Cornerstone elements include protocol review, specialized committee evaluations, routine facility inspections, and medical assessment and surveillance.

The Institutional Animal Care and Use Committee (IACUC) protocol submission form queries investigators regarding potential use of biological agents, hazardous chemicals, and radioisotopes. Protocols involving the use of biological agents or radioisotopes require pre-approval from specialized committees (i.e., Institutional Biosafety Committee, and Radiation Safety

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Committee) prior to IACUC approval. OLFS assists with evaluating proposals or activities involving unique hazards (e.g. chemicals, UV light, noise, lasers, electrical hazards, compressed gas, etc.).

Routine facility inspections are performed by IACUC and OLFS to provide ongoing hazard and risk assessment, as well as to assess the adequacy of control measures. Medical professionals contribute to the comprehensive risk assessment process by evaluating the health status of the individual with respect to particular animal species contacted, potential exposure to harmful materials or activities, and the nature and extent of the contact with the animal.

The most common biological hazards and risks that have been identified include allergy/asthma, zoonotic infections, and bites/scratches. The most common chemical hazards include the use of anesthetic gases, disinfectants/cleaners, and chemicals for preserving tissues. The most common physical hazards include slips, trips, falls, and lifting hazards.

5. Work Practice and Engineering Control Measures

Detailed work practice and engineering control measures are specified in relevant IACUC protocols. Some fundamental measures applicable to nearly all animal care and use activities are described below.

Hand washing is required after handling animals and prior to leaving animal care and use areas. In areas where sinks are not available in the immediate vicinity, hand sanitizer dispensing stations are provided to readily facilitate infection control until proper hand washing facilities become available. Eating, drinking, and smoking are prohibited in all animal rooms.

Laboratory coats, scrub tops, gowns, disposable coveralls, or other garments are worn as appropriate to protect street clothes from contamination when handling animals. Gloves are worn whenever handling animals, their fluids, tissues, excreta, or soiled bedding to reduce exposure to allergens and potentially zoonotic agents. Protective equipment such as head covers, shoe covers, eye protection, hearing protection, and respirators may be required as determined by risk assessment. Personnel who use respirators are enrolled in the University Respiratory Protection Program managed by OLFS. Essential elements of this program include medical clearance, respiratory selection and fit testing, and training. Protective clothing and equipment is not to be worn beyond the boundary of animal work areas.

Sharps precautions are rigidly enforced, as are methods to minimize human exposure to biological agents and hazardous experimental or laboratory chemicals (e.g. anesthetic gases, tissue fixatives). OLFS tracks and manages certification of all biological safety cabinets used to protect personnel. Facilities management tracks and manages certification of all chemical fume hoods.

Personnel who are not involved in animal care and/or use but nevertheless need to enter areas where animals are housed or used (e.g. facilities management personnel, custodial staff, outside contractors) must be trained and approved by an authorized person who can inform them of the risks and provide the necessary personal protective equipment for the area.

6. Training

Prior to participating in procedures involving contact with animals, all animal handlers through their initial risk assessment are given the option of submitting an Initial Medical Questionnaire for Individuals Who Work with Animals (IMQ) or opting out of medical surveillance. After enrolling in medical surveillance, an individual may opt out later, if for example their exposure level becomes lower, by signing and submitting a declination statement. The occupational health physician will review the questionnaire and determine which personnel require a medical appointment. During the appointment, the physician discusses risk factors relevant to the individual's work.

The OLFS provides training and oversight of chemical, radioactive, biological, and other occupational hazards. All University personnel have access to this training.

Personnel engaged in animal research or teaching attend a mandatory training session taught by the coordinators of animal facilities or their designee. The training is designed to present the most up-to-date guidelines and procedures to all animal care personnel, and include training on proper use of anesthetics, analgesics, and tranquilizers, animal handling techniques, and zoonotic diseases. During training, individuals who are pregnant, want to become pregnant, or are immunocompromised are advised to consult with the occupational health physician.

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7. Screening.

- a. Each participant completes an Initial Medical Questionnaire for Individuals Who Work with Animals, which is available from the Office of Research Compliance (774-1152), unless they opt out by submitting a signed declination statement. The questionnaire will be submitted to CMU's consulting occupational physician, who will then screen the completed questionnaire using specific criteria. As part of the questionnaire, participants will be queried on allergies associated with animal handling. Participants with a history of pre-existing animal allergies or asthma will be provided with information and training as appropriate, and if needed will be referred to their primary care provider. Health histories are used to assess risk focusing on allergies/asthma, zoonotic disease, animal bites/scratches, and immunization updates. If participants are deemed higher risk (i.e. has asthma/allergies to animals, pregnant/immunosuppressed) they may be asked to come in for a physical exam or other testing as well as documentation from their treating physicians as to their ability to work with animals.
- b. Participant's protected health information will be treated in a manner consistent with the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule and CMU's HIPAA policies.
- c. If any hazardous biological, chemical and physical agents are identified in the initial screening, the appropriate CMU oversight committees for these areas will be notified.

8. Preventive Medicine (Health Maintenance Program)

- a. If CMU's consulting occupational physician identifies significant potential health risks, he/she may schedule pre-employment physical exams, further evaluate the participant, provide immunizations, order titers, give occupational health recommendations, and refer as appropriate. Participant's protected health information will be treated consistent with the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule and CMU's HIPAA policies.
- b. Medical care of CMU personnel for work related injuries or illness will be provided by either the Central Occupational Medicine Program, 779-5600, or McLaren ReadyCare, 773-1166.
- c. Prior to participating in procedures involving contact with animals, all animal care personnel must submit an IMQ due to moderate to high level of risk from allergens regardless of full or part time status of their position. Research and instructional personnel, including volunteers and students involved in classroom or directed research may submit an IMQ, for these individuals the process is participant driven based on the information they are provided during initial risk assessment. Individuals at moderate risk are encouraged to submit an IMQ. It is strongly recommended that individuals at high risk submit an IMQ. Once enrolled, individuals may decline to participate in a preventive medicine program recommended by CMU's consulting occupational physician by signing and submitting a declination statement to the Office of Research Compliance. CMU, however, reserves the right to require individuals to participate in a preventive medicine program, as it deems necessary. Note: An individual who was previously enrolled in medical surveillance and was approved with restrictions by the occupational health physician may not opt out of medical surveillance without the occupational health physician removing those restrictions.

9. Immunizations

All participants will have the following documented through their Initial Medical Questionnaire for Individuals Who Work with Animals:

- a. Immunizations will be updated according to recommendations of the Immunization Practices Advisory Committee (ACIP) of the Center for Disease Control. Booster doses will be recommended as needed.
- b. Other vaccination recommendations will be determined on an individual basis after the risk assessment that reviews animal species, risk exposure, and personal health issues. The CMU consulting occupational physician, with added consultation as needed from the CMU Biosafety Officer or the Principal Investigator of the project, will make this determination.

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Individuals may decline to participate in an immunization program recommended by CMU's consulting occupational physician. CMU, however, reserves the right to require individuals to participate in a preventive medicine program, which may include immunization, as it deems necessary.

10. Animal-Related Illness, Injury, or Unsafe Conditions

All participants should be familiar with CMU's Guidelines for Handling Injuries on Campus, which can be found at: https://www.cmich.edu/fas/fsr/rm/risk_management/Pages/Injuries.aspx

11. Monitoring of Policy

The CMU Institutional Animal Care and Use Committee (IACUC) together with the Office of Laboratory & Field Safety (OLFS) shall periodically assess this policy for compliance and potential needed changes.

Central Michigan University reserves the right to make exceptions to, modify or eliminate this policy and or its content. This document supersedes all previous policies, procedures or guidelines relative to this subject.