

# Appendix XIX: Occupational Health Program for Individuals with Animal Contact

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The Guide for the Care and Use of Laboratory Animals (The Guide) states that "an occupational health program is mandatory for personnel who work in laboratory animal facilities or have substantial animal contact".

Concerns existing in providing care to or working with animals and animal tissues as well as some animal infections, under certain circumstances, are zoonotic (transmitted from animal to man). Many times the infection in the animal produces little, if any, signs of illness. If in the conduct of your work or activities at WSU, you have direct contact with animals, animal tissues, animal body fluids or animal wastes, you become aware of the WSU Occupational Health Program for Individuals with Animal Contact.

The program is designed to provide you information, to increase your awareness on the necessary precautions to be taken when working with animals and, as necessary, to assess your health in relationship to your work with animals housed at WSU. The extent of your participation in the program is predicted upon and commensurate with work related animal hazards and evaluated risks. The content of the WSU program is based upon recommendations contained in the Guide and various reports from the laboratory animal literature.

The program serves as a supplement to other existing WSU and unit/department occupational health and safety programs. Examples of these other programs that you should be aware of are detailed in the WSU Safety Policies and Procedures Manual and include: the Laboratory Safety Program and Manual; the Worker's Right to Know - Hazard Communication Program; applicable OSHA standards and regulation; the WSU Biological Safety Policy (to include health surveillance and information provided to you as an individual associated with such a project); Personal Protective Equipment Programs; and the Radiation Safety Policy.

The WSU Occupational Health Program for Individuals with Animal Contact is administered by the Laboratory Animal Resources Center and has two components:

## I. EDUCATION

The attached pages provide information about specific conditions or practices with which you, as an individual with animal contact, should be familiar.

It is important that you read the material provided in the information sheet entitled General Risks for those Who Handle Animals and Their Tissues and the sheet entitled Allergy to Laboratory Animals.

If you are a female of child bearing age, you be also familiar with the information on Toxoplasmosis (provided on Dog and Cat sheet).

Depending on your animal contact, you should be familiar with the appropriate species specific information sheet(s). The purpose of these information sheets is to inform you of health risks associated with specific animal species and to describe means of prevention. It is beyond the scope of the information sheets to be all inclusive. However, should you desire more information on any specific zoonotic disease, the Laboratory animal Resources Center (335-6246) can provide additional reference papers/information.

### **GENERAL RISKS IF YOU HANDLE ANIMALS AND/OR ANIMAL TISSUES**

There are certain hazards associated with your handling of animals and animal tissues:

- Physical injury can occur as the result of bites or scratches (e.g., rats, mice, hamsters, rabbits, dogs, cats), kicks, butts or crushes (e.g., horses, cows, goats).

Adequate training is often the key to preventing physical injury. If at any time you feel the need for additional information or you require assistance in the proper procedures for handling animals, your supervisor, the animal care staff where your animals are housed or the Laboratory Animal Resource Center (335-6246) should be contacted.

- Allergic reactions can occur as a result of breathing or contacting allergens such as animal dander or urine.

Preventing exposure to allergens via the use of protective clothing (face masks, gloves, lab coats) when you handle animals is recommended to minimize the risk of allergic reactions. You should review the information sheet on allergy to Laboratory Animals. Additional information may be obtained from the Laboratory Animal Resource Center (335-6246)

- Zoonotic diseases (infections transmitted from animal to man), while not common, can be contracted by handling animals or animal tissues. Such diseases may produce no signs of illness in the animal but may produce severe disease in man.

Information sheets that describe some of the specific consequences of working with various animal species and tissue s are available from the Laboratory Animal Resource Center (335-6246). these sheets are designed to familiarize you and others with animal and animal tissue contact of potential risks.

In the event you do become ill, it is important to let the physician caring for you know that you work with animals and what types of exposure you may have had in the event the illness is related to animal contact.

#### Reporting Injury or Illness

The WSU Safety Policies and Procedure Manual, Section 25.20.1, Reporting Bodily Injury Accidents or Occupational Illnesses, required that personnel report all accidents to their immediate supervisor for evaluation/investigation. Likewise, you are to report illnesses which result from job-related activities. The supervisor then must provide information on such an accident or illness within 24 hours to the WSU Department of Benefit Services and Risk Management.

Complete and timely reporting is very important and is essential to ensure that you obtain needed care and just compensation. Reporting also enables the university to become aware of accident/illness patterns, to determine contributing factors and to provide for zoonosis surveillance.

Although an animal scratch or bite might not seem serious to you, its occurrence should be reported. In addition to the danger of tetanus, there are relatively rare diseases such as "cat scratch fever" and "rat bite fever" which can be transmitted from animals to you. Complete and timely reporting allows proper measures to be taken and additional training provided if needed.

### **ALLERGY TO LABORATORY ANIMALS**

Allergy to animals is a significant occupational health concern for individuals who work with the common laboratory animal species. Cats, rabbits, mice, rats, and guinea pigs are the most frequently implicated species. Materials from animals that have been traditionally implicated in the development of allergy include fur, hair, dander, and urinary proteins. Individuals come into contact with such allergenic material from animals in many ways. Handling animals, performing techniques such as injections blood sampling, testing, euthanasia, feeding and cleaning cages are examples of procedures where a person might be exposed to allergens. Exposure may occur by inhaling contaminated dust from the bottom of a cage or by direct contact with the material. It is virtually impossible to be in contact with animals without having contact with allergenic materials.

Allergy can be manifested by a number of symptoms to induce rhinitis (condition characterized by runny nose and sneezing similar to hay (fever) conjunctivitis (irritation and tearing of the eyes), asthma, and/or dermatitis (skin reactions caused by contact with an allergenic substance.).

Various studies indicate that between 10-20% of individuals exposed to animals in a laboratory setting will develop some symptoms of allergy. While most individuals who will develop allergy to animals will do so within the first two years of exposure, certain sensitive individuals may experience almost immediate reactions. Individuals with a prior personal or family history of allergy, asthma, or hay fever may have an increased risk for developing allergy to animals.

Most of the individuals who develop reactions to animal contact experience symptoms such as allergic rhinitis and conjunctivitis. However, more severe reactions with chest symptoms such as asthma with shortness of breathe, wheezing or coughing may also be associated with exposure. Individuals with a prior person or family history or asthma may be more likely to develop asthma after contact with animals. Skin manifestations such as a general or localized rash/wheals, may also be associated with animal contact.

The WSU Safety Policies and Procedure Manual, Section 25.20.1, Reporting Bodily Injury Accidents or Occupational Illnesses, requires that personnel report all illnesses which result from job-related activities to their immediate supervisor for evaluation/investigation. Allergy to laboratory animals should be considered such an illness. Individuals experiencing symptoms would also be advised to contact their physician for diagnosis and treatment.

Certain procedures should be routinely followed in order to minimize the risk of development to f allergy to animals. Animals should be worked with in well ventilated areas to decrease the build up of various particles in the air. Exposure can be further reduced by using good hygiene practices (e.g., hand washing) and personal protective equipment such as gloves, particulate or fine dust masks and laboratory coats. Specialized equipment, work areas and work routines may also be available/practiced in the facility where an individual works with animals to further decrease exposure.

Care should also be taken in moving animals from one room to another via corridors or elevators. To decrease exposure to individuals located along the transport route, cages should be covered with a material such as a filter top or drape while being transported to a laboratory or procedure area.

For additional information, the articles listed below are available upon request from the Laboratory Animal Resource Center (335-6246):

Guilloud, Robin. Common sense Approach to Animal Allergy. AALAS Bulletin: 30(6).1991.

Hunskaar, Steinar and R. Fosse. Allergy to Laboratory Mice and Rats: A Review of its Prevention, Management, and Treatment. Laboratory Animals: 27, 1993.

Olfert, Ernest. Allergies to Laboratory Animals-Aspects of Monitoring and Control. Animal: 22(2), 1993.

**For additional information, the articles listed below are available upon request from the Laboratory Animal Resource Center (335-6246):**

Lucas, Victor and D. Charron. Promoting Safety in a Laboratory Animal Facility. Lab Animal 22(2). 1993.

Richmond, Jonathan. Hazard Reduction in Animal Research Facilities. Lab Animal 22(2). 1991.

Richmond, Jonathan, P. Arambulo and A. Ruiz. Protection from Risk in Animal Studies. Lab Animal 22(2). 1991.

Soave, Orland and C. Brand. Employer Responsibility for Employee Health in the Animal Environment. Lab Animal 20 (2). 1991.

**Other sources of information:**

Biosafety in Microbiological and Biomedical Laboratories, U.S. Department of Health and Human Services, Center for Disease Control and Prevention, National Institutes of Health, 3rd. Edition. May 1993.