Introduction
The Laboratory Animal Handler’s Medical Monitoring Program has an important role in the Institutional Animal Care and Use Program. The program operated by Marquette University’s Animal Resource Center, is designed to protect both the institution’s personnel and the laboratory animals. This brochure is an introduction to the Occupational Health and Safety Program for personnel with laboratory animal contact (it is not necessarily restricted to those individuals who work in the research laboratory setting). The requirements of this program are based on guidelines in the National Research Council’s Guide for the Care and Use of Laboratory Animals and Occupational Health and Safety in the Care and Use of Research Animals.

Who must participate?
All Marquette University employees listed on the Animal Care and Use Protocol Form as well as those who care for the research animals must receive instruction and are required to fill out a health history form. This may include, but is not limited to, animal care staff, investigators, research assistants, graduate students, and postdoctoral associates. Department heads, facility managers, and supervisors may identify additional employees whose contact with laboratory animals, tissues or waste from laboratory animals warrant participation in the program. It is the principal investigator or supervisor’s responsibility to ensure that their employees are enrolled in the program prior to handling research animals. Non-compliance may result in the loss of animal use privilege and facility access.

Individuals with animal contact who are not employees of Marquette University are encouraged to enroll in the program, however participation is not mandatory. At a minimum these individuals will receive this brochure information about health considerations relative to the animals with which they have contact. Individuals who are involved in infrequent contact (e.g. Undergraduate students whose exposure to animals will be participation in formal coursework) will not be required to enroll in the program. Prior to contact, they will be provided with information about any health considerations relative to the animals with which they have contact and precautions to reduce hazards.

What is included?
The amount of participation in the program required of employees is directly proportional to the extent of animal contact and to a certain extent the species of animals that are handled. At a minimum, all employees should have a current tetanus vaccine. Tetanus vaccination should be received every 10 years.

You will be given a Laboratory Animal Contact Health Questionnaire you which you need to fill out and submit, by campus mail or in person, to Mr. Jim Schabla, PA-C Occupational Risk Assessment Coordinator. The questionnaire requests information regarding your personal health status. He will review your questionnaire and send you recommendations based on your answers. He may schedule a 20 minute appointment with you, if a more detailed review of your history is needed.

Each year, thereafter, you will receive a Health assessment to be completed by you and returned to Mr. Schabla. Once again, he will review your questionnaire and send you a letter of recommendation based on your answers. He may schedule a 15 minute appointment with you, if some physical examination is needed.

Contact your supervisor or department head if you have any questions regarding your participation in the program.

Information regarding potential exposure to zoonotic diseases, occupational asthma, and methods to reduce hazards and risk factors are available on this flyer and during the animal care training.

ANIMAL FACILITY HAZARDS
In Case of Injury
If you are injured while working with animals, report the problem to your immediate supervisor and the Animal Facilities Management (especially if you have been bitten by an animal). An Incident/Injury report must be filled out if serious issues arise. A log sheet is provided to all, if bites and scratches occur. If you are a MU student, the problem occurred during normal business hours and emergency care is not needed, consult Student Health Services. If you are a MU student and the problem occurred after normal business hours, contact Public Safety for transport to the closest hospital emergency room. If you are an employee or faculty and the problem occurred during or after normal business hours go to your health provider or an emergency room. Aurora Sinai is the closest location for emergency care.

Things you should know if you are pregnant
Pregnant personnel or those considering pregnancy should avoid working with hazardous agents including radioactive material. Inhalation of toxic chemicals and certain anesthetic vapors should be avoided especially during the first trimester of pregnancy. You are encouraged to notify your supervisor of your pregnancy as soon as possible.

Diseases communicable from animals to humans – Zoonoses
Humans may be susceptible to infectious diseases suffered by animals. Infectious diseases transmitted from animals to humans are called zoonotic diseases. In many cases the animals show little, if any sign of illness. A bacterium from the normal flora of a healthy animal may cause a serious disorder in a person exposed to it. While the animals may have “resistance” to these microorganisms, humans with no previous exposure to the agent may lack this protection. Therefore, one should always be aware of the possible consequences of working with animals and take appropriate precautions to minimize the risk of infection. In the event that you do become ill, it is important that you inform the physician caring for you that you work with animals. Examples of specific zoonotic diseases and the potential reservoirs are described elsewhere in this brochure. Some common sense steps can be taken to decrease the risk of infection. These include cleanliness in routine tasks around animals and hand washing after completion of each animal related task. You can protect yourself against accidental self-inoculation of a zoonotic disease by:

- Wearing gloves
- Taking enough time to give injections
- Never recapping needles
- Discarding syringes and needles in containers designed for proper disposal
- Inoculating animals in teams of two

Procedures such as necropsy, bedding changes, inoculations with certain agents and tissue, and fluid sampling may require using physical containment devices, respirators, or other personal safety gear as indicated.

Because the scope of possible zoonotic infections is quite large, only a few examples will be described here. All personnel should also be aware that laboratory animals (particularly rats, rabbits, guinea pigs, hamsters, cats, and dogs) are sources of potent allergens to sensitized persons. Repeated exposure may lead to a more serious problem – occupational asthma. More detailed
information regarding zoonoses and animal-induced allergy/asthma will be forwarded to you after enrolling the program. If you are feeling ill or have concerns about your health, you are advised to seek medical attention as you would for an injury, as detailed above.

If you work with rodents (e.g. Guinea pigs, hamsters, mice, and/or rats) or rabbits
Contact with rodents or rodent tissue requires precautions against diseases such as toxoplasmosis, tapeworm infection, and lymphocytic choriomeningitis (LCM). Attention should also be paid to the possibility of allergic reactions. Care must be taken when handling rodents, as well as potentially infected materials such as bedding and feces.

Those individuals working with rabbits and guinea pigs should be especially aware of the potential for allergic reactions. Precautions should be taken when handling these animals, as well as their waste and bedding materials.

If you have been in contact or exposed to other rodent or rabbit housing facilities/shelters within the past 72 hours, please disclose this to the Animal Resource Center (ARC) Management which will assess and determine whether access to the animal facility is appropriate.

If you work with hazardous agents
Methods exist for monitoring exposure to potentially hazardous biological, chemical, and physical agents. Protective devices should be used, and other safety practices consistent with safety guidelines should be adopted. Potentially hazardous chemicals in the animal laboratory and animal facility include disinfectants, cleaning agents and pesticides.

In order to protect yourself against hazardous exposure, wear gloves when handling chemicals, infectious materials, and animals, and wash your hands after use. Infectious materials must be handled in a fume hood. All work surfaces should be decontaminated daily. All contaminated materials should be decontaminated (by autoclaving or chemical disinfection) before washing, reuse or disposal. If you have questions about the hazardous nature of any substance that you are using, the proper method of exposure prevention, or disposal procedures contact your immediate supervisor.

For more information, please contact:

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LABORATORY
ANIMAL CONTACT
OCCUPATIONAL HEALTH AND SAFETY PROGRAM

MARQUETTE UNIVERSITY
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