

# Occupational Health and Safety Program (OHSP) for Personnel with Laboratory Animal Contact

(adapted from: www.northflorida.va.gov...ochure\_03-24-2011\_revised-layout.docx)

Each research facility with an animal research program must establish an OHSP to protect the personnel who are involved in animal research, or who are otherwise at risk of exposure to animals or their (unfixed) tissues or fluids.

**Who should participate?** All personnel who work with animals or unfixed tissues in research must be given the opportunity to enroll in the OHSP. Farm workers should also participate due to their animal exposures as well as that to physical and chemical hazards. Furthermore, individuals who may have intermittent animal exposure must also be given the opportunity to enroll (e.g. IACUC members, housekeeping staff, physical plant, police officers). You may choose to decline to receive OHSP services that are not required to protect the health of personnel and animals. For information on enrollment contact your Employee Health Coordinator at (859) 218-3257.

**What is included?** The services you receive will depend on the type and frequency of exposure, and your medical history. A medical surveillance form is used to assess your individual risk factors. A health professional will review your responses and determine your needs. For example you may need measles/rubella vaccine to protect primates from these diseases or a flu vaccine if you are exposed to birds or swine to prevent you from getting sick.

## ANIMAL EXPOSURE RISKS

The hazards associated with handling animals can be divided into three categories:

**1) Physical Hazards.** Examples of such hazards include animal bites and scratches, sharps injuries, injuries associated with moving cages or equipment, and adverse consequences from excessive noise or accidental exposure to workplace hazards. In farm settings physical injury secondary to kicks, farm equipment, etc are also of great concern. Tractor overturns cause more deaths than any other type of farm accident. The key to preventing these injuries is proper training and meticulous attention to proper work practices.

- Use appropriate techniques for animal handling and restraint.
- Do not recap needles and dispose of sharps in approved containers.
- Employ good ergonomic practices to avoid muscle sprains and repetitive motion injuries.
- Wear recommended personal protective equipment (PPE) such as a lab coat, gloves, eye and hearing protection.

**2) Allergies.** Allergic reactions to animals are among the most common conditions that affect the health of workers exposed to laboratory animals. Sneezing, itchy eyes, and skin rashes are typical



clinical signs, but in serious cases, asthma or anaphylaxis may occur. Allergens include urine, dander, and saliva, especially from rodents. You can limit exposure to allergens by using appropriate PPE and using safe work practices.

### Protect Yourself from Allergies!

Work in a clean, well-ventilated environment.

- Wear appropriate PPE such as a lab coat and disposable gloves, and **never rub your face or eyes** until you have removed your gloves and washed your hands thoroughly.

It may be helpful to wear a surgical-type mask to reduce airborne exposure in animal rooms. If you need a respirator, you must be medically cleared, fit tested and trained annually.

**3) Zoonotic diseases.** Zoonotic diseases are those that can be transmitted from animals (or animal tissues) to humans. Although a substantial number of animal pathogens may cause disease in humans, zoonotic diseases are not common in modern animal facilities, largely because of prevention, detection, and eradication programs. In farm settings diseases like Q fever, orf, brucellosis, salmonellosis and many others are of concern.

Unfortunately some infections of animals may produce serious disease in humans *even when the animals themselves show few (if any) signs of illness*. One example is Macacine herpesvirus 1 (also known as herpes B or Cercopithecine herpesvirus). While in macaques this infection causes little clinical signs, in humans it has up to a 70% mortality rate.

Therefore, you must be aware of possible consequences when working with each species of animal and take precautions to minimize the risk of infection. **If you experience flu-like symptoms or other signs of illness, be sure to tell your doctor that you work with animals, just in case your illness is related to your work with animals.**

### Prevention...

Common sense steps that can be taken to lessen zoonotic disease risk include:

- Do not eat, drink, or apply cosmetics or contact lenses around animals.

- Wash your hands after handling animals.
- Wear gloves when handling animals or their tissues
- Use proper manual and/or anesthetic restraint when working with fractious animals and/or administering hazardous agents.
- Work in pairs whenever possible.
- **Do not recap used needles!** Whenever possible, use safety devices, activate the safety feature as soon as possible and dispose of them promptly in a biohazard “sharps” container.
- When performing procedures such as bedding changes, blood or urine collections, or necropsies, work in biological safety cabinets or wear specialized PPE as directed.

**Consult your supervisor, the Safety Officer, or Employee Health Coordinator if you need additional training at any time.**

## WHAT YOU SHOULD KNOW

### About Bites, Scratches, and other Injuries...

Contact your Supervisor and Occupational Health immediately if you are bitten or scratched, if you injure yourself while performing your job, or if you experience unusual disease symptoms.

### If you are Pregnant...

Working with hazardous agents and toxic chemicals is discouraged during pregnancy. Consult Employee Health and your personal physician for advice about working safely during pregnancy. Toxoplasma is an infectious agent sometimes shed in cat feces, and it can infect the fetus of pregnant women that do not have acquired immunity. Pregnant women should generally avoid any contact with cat feces or litter boxes

### If you work with Dogs or Cats...



The main risks associated with working with dogs and cats are bites and scratches. Sometimes scratches or bites can result in infections. Cat bites can result in particularly severe infections. Cat scratch fever (Bartonellosis) is caused by a rickettsial organism and is characterized by flu-like symptoms and swollen lymph nodes.

### Rabies

The likelihood of contracting rabies as a result of a bite is now very low because research dogs and cats are typically vaccinated for rabies. Farm worker exposure to rabies is of concern due to wildlife access to barns and other farm areas.

### If you work with Rodents or Rabbits...

Allergies are common among personnel who work with rodents (e.g., mice, rats, guinea pigs, hamsters) and rabbits. If you have pre-existing allergies or if you experience a runny nose, itchy eyes, or skin rashes when working around these species you should report these symptoms immediately to Occupational Health. Measures can be taken to limit your exposure to allergens, thereby reducing the severity of symptoms and decreasing the likelihood that symptoms will worsen.

Rodents and rabbits obtained from commercial sources have a low risk of transmitting zoonotic diseases. However, animals caught in the wild can harbor a variety of bacterial, viral, fungal, and



parasitic infections that can constitute a significant hazard to personnel.

### If you work with Hazardous Agents...



The proper use of hazardous biological, chemical, and physical agents in animals depends on careful planning, proper training, and careful attention to prescribed work practices. Signs should be posted indicating the nature of the hazard, necessary precautions, and emergency contact information. The PPE needed depends on the agent in use, but in all cases gloves should be worn and hands should be washed after handling potentially contaminated materials. A biological safety cabinet should be used when handling infectious materials, especially if there is a potential for generation of aerosols, and a fume hood should be used when handling toxic chemicals or radioactive materials. The measures must be appropriate for the specific hazard, as determined by the Safety/Biosafety Officer in consultation with the investigator, the Institutional Biosafety Committee, and the veterinarian.

Many chemicals, from pesticides to fertilizers, are used in farms. Proper handling is essential for safety. Toxic gases from silos, manure pits and other sources are also of concern.

### FOR FURTHER INFORMATION

The services offered to you by this program may differ from those offered to other individuals. This is because each person's needs are different and depend on many factors including animal species, activity performed, etc. Please contact your Employee Health Coordinator at (859) 218-3257 for more information.