



Longwood ANIMAL-RELATED RISK FACT SHEET for those working with or around animals

ANIMAL-RELATED RISK EVALUATION:

It is mandatory that you complete the occupational health documents provided to you as part of the security access card requirement and/or your conditional job offer. The occupational health documents are part of your Facility Security Access Form process. With this information, an occupational medical health professional will assess your risk for allergies/potential exposures and inform you of the proper protective equipment required for work. Once on the job, if any symptoms of exposure or allergies occur, inform your Supervisor or Principal Investigator/Administrator immediately so that you may be evaluated by an occupational health professional. If allergies develop you will receive the proper protective equipment. Laboratory animal allergies may also develop over time with a variable exposure period.

RISKS ASSOCIATED WITH ANIMAL AREAS:

Non research personnel may encounter animal fur and/or dander in the work area when animals are transported nearby or cages are opened in adjacent laboratory areas. It is critical that research staff transport animals only in closed and covered rodent transport containers in order to minimize personnel exposure to laboratory animal allergens. If you see animals transported in open containers or cages or cartons that are not placed in a plastic bag for the transport, please call the Harvard Center for Comparative Medicine at 617-432-1285.

Allergies to Animals: Laboratory animal allergens induce allergic reactions in susceptible individuals. Symptoms of laboratory animal allergy include: urticaria (itchy skin, hives), conjunctivitis (irritated eyes), sneezing, nasal drainage, nasal congestion, asthma (cough, wheezing, shortness of breath) or in extreme cases anaphylaxis (shortness of breath, fainting, vomiting). If you experience any of the symptoms listed above or have concerns related to possible animal exposure in the workplace, inform your Supervisor or Principal Investigator. If you develop laboratory animal allergies, you may require a NIOSH-approved respirator to continue to be able to work safely with animals. The respirator must be fit-tested to each individual after successful medical evaluation. “Comfort” or surgical facemasks do not adequately filter animal fur and dander and may not be used to protect against respiratory allergies. If you think you may have allergies to animals, phone: 617-432-1285 and ask for the occupational health administrator.

Zoonoses: Although modern laboratory animal breeding and production has greatly improved the microbiologic quality of research animals, some animals are naturally infected with viruses or bacteria that may cause severe disease in people. Protection of research and animal care staff requires strict adherence to standard work practices and protective clothing requirements, prompt reporting of all animal-related injuries, compliance with OSHA and the mandatory occupational health processes which may include allergy testing and, when appropriate, vaccination. Specific information relevant to using laboratory non-human primates is provided in the following sections.

Laboratory Safety

Zoonoses (cont'd): Studies using experimental pathogens or wild-caught animals, which may harbor zoonotic agents, require separate approvals by the Institutional Biosafety Committee (COMS or PIBC) as well as the Institutional Animal Care & Use Committee (IACUC). All animals at Harvard Medical School are obtained solely under the aegis of the Longwood Medical Area's IACUC (also known as The Standing Committee on Animals) for the purposes of animal experimentation described in an approved Animal Experimentation Protocol.

Protocol-related Risk: If your research requires creating transgenic animals or introducing infectious agents, recombinant or synthetic nucleic acids, human /non-human primate blood, cell lines, or tissues into animals, your activities must be approved both by the IACUC (Institutional Animal Care & Use Committee) and your Institutional IBC (COMS).

Other hazardous material use including toxic or radioactive materials will be reviewed by the appropriate IACUC safety reviewers.

In addition, all rodent-origin tumor and cell lines must be tested and certified to be free of rodent pathogens before use in rodents. Transplantable tumor cell lines, rodent tissue or serum derived material administered parenterally to rodents, are a potential source of infectious disease. Once approved, the IACUC requires that you receive specific training before you may begin work with these agents. This training will be given by HCCM personnel (email: hccmtraining@hms.harvard.edu). Most hazards associated with these materials and agents occur during preparation and administration of the materials. Special attention is required to avoid accidental injection, splashing or ingestion of the materials or contamination in surrounding workspace. You must also plan for contamination of cages, bedding and carcasses. You must assure that safe handling practices for these items are developed before any work begins. The HCCM and EHS will work with you to develop these procedures.

NON-HUMAN PRIMATES:

Handling of non-human primates (NHPs) carries additional risk for health and safety because they can transmit serious infectious diseases to research and animal care staff. NHPs are physically strong for their size, can exhibit aggressive behavior, and may inflict painful physical injuries. Macaques may be infected with Herpes B virus (*Macacine herpesvirus 1*), which is an especially dangerous virus transmissible to humans. Herpes B virus is in the same viral family as the human herpes virus (Herpes simplex). Humans can be infected with Herpes B and die from rapidly progressive encephalitis unless they receive prompt medical treatment. Infected monkeys may be normal, or may have vesicles or ulcers in the mouth, conjunctiva or genital area.

Follow these general safety principles when working with nonhuman primates:

Wear required protective clothing at all times when working with or near NHPs. This includes safety glasses or safety goggles, hair bonnet, shoe covers, face shield and facemask, gloves, and a fully buttoned laboratory coat. Protective clothing will help you to avoid bites or scratches. If you are bitten or scratched by a macaque, secure the animal and obtain first aid immediately and refer to the guidelines set forth in the Monkey Bite & Scratch kit, which is available in every monkey room. In addition, each monkey room contains an SOP for post exposure to a monkey bite or scratch. Mandatory training, including semiannual tuberculosis testing, will be provided to all non-human primate personnel.

INSTRUCTIONS:

Once you have obtained your Harvard ID card – go to the HCCM website at hccm.med.harvard.edu for animal facility access instructions. At the website, go to: Getting Started, Facility Access, Instructions, and go to the form called “Animal Facility Access Request Form” to print the mandatory access & training form. Access to the animal facility will not be granted without completing the “Animal Facility Access Request Form”

KEY CONTACT INFORMATION:

Harvard Center for Comparative Medicine

Phone: (617) 432-1285 Website: <https://hccm.med.harvard.edu/>

Harvard Center for Comparative Medicine Training Classes

Email: hccmtraining@hms.harvard.edu

Harvard Environmental Health and Safety Department

Phone: (617) 432-1720 Website: www.ehs.harvard.edu

Occupational Health Program Phone:

(617) 432-1285 Website: <https://hccm.med.harvard.edu/>

Harvard Longwood Campus ID Office at HSPH

Phone: (617) 432-0389 Website: <http://www.hsph.harvard.edu/operations/services/photos-ids/>

Harvard Medical Area Standing Committee on Animals (IACUC)

Phone: (617) 432-4886 Website: hms.harvard.edu/HMA

Institutional Biosafety Committees:

Harvard Committee on Microbiological Safety (COMS)

Email: biosafety@harvard.edu Website: www.hms.harvard.edu/orsp/coms