

Occupational Health Recommendations for Persons Working with Mice and Rats

All personnel working with animals, their tissues, or working in areas where animals are housed must complete an Animal Use Medical Screening Form every 3 years or more often at the discretion of the Occupational Health Nurse. This is a program to identify and provide follow up for individuals who may be at greater risk for contracting zoonoses. This form can be accessed electronically at:

<http://www.ehs.washington.edu/rbs/resocchealth.shtm>

1. Tetanus booster should be obtained every 10 years.
2. Wear protective gloves when handling the animals. Wash hands thoroughly upon completion of tasks with animals/glove removal.
3. **Zoonotic diseases:**
 - **Lymphocytic choriomeningitis:** An arenavirus commonly can naturally infect mice. Athymic, SCID, and other immunodeficient mice can pose a special risk of harboring silent, chronic infections and present a hazard to personnel. Mice and hamsters are the only animals known to develop latent infection. Spread of LCMV among animals via contaminated tumors and cell lines can also occur. LCMV is a known teratogen. It is now rarely found in laboratory animal facilities due to being eliminated from most vendors through breeding and viral screening of their colonies. The University of Washington adheres to such a screening policy upon acceptance of new mice and periodic screening of existing colonies.
 - *Transmission:* Contact with tissues including tumor, feces, urine, and aerosolization of all of the above.
 - *Disease in people:* Flu-like symptoms, mild to severe. Neurologic symptoms may develop in about half of adults infected.
 - **Leptospirosis:** *Leptospira* spp. bacteria found in many animals but are most commonly associated with livestock and dogs. Transmission from laboratory rodents to people has been reported. Reservoir/source of infection to people: Rats, mice, voles, hedgehogs, gerbils, squirrels, rabbits, hamsters, reptiles, dogs, sheep, goats, horses, standing water.
 - *Transmission:* Leptospire are shed in the urine of infected animals. Direct contact with urine or tissues via skin abrasions or contact with mucous membranes has been reported. Transmission can also occur through inhalation of infectious droplet aerosols and by ingestion.
 - *Disease in people:* Flu-like symptoms, mild to severe. Death has been reported.
 - **Rat bite fever:** This is caused by the bite of a rat infected with *Streptobacillus moniliformis* or *Spirillum minus*. Strep. Commercial suppliers of rats have eliminated moniliformis.
 - *Transmission:* Bite of infected rat.

- *Disease in people:* Fever, lymphadenopathy, swelling at site of wound. Incubation period usually 1-3 days but may be up to 6 weeks. May cause arthritis in untreated patients.
 - **Ringworm:** fungal skin infections
- 4. **Injuries:**
 - Immediately wash area thoroughly with soap and water for at least 15 minutes.
 - Control any bleeding and cover with protective dressing (bandage, etc.).
 - For any injuries, needlestick/sharps injury or for signs/symptoms of wound infection such as redness, swelling or pain, contact the Employee Health Clinic at Hall Health at 685-1026. After hours or if the clinic is unavailable, go to the UWMC ER.
 - Report injuries to your supervisor and on the UW OARS (Online Accident Reporting System):
<http://www.ehs.washington.edu/ohsoars/index.shtm>
- 5. **Illness:**

If you develop signs or symptoms that you think may be related to your work with these animals and/or research work, contact the Employee Health Clinic at 206-685-1026. If you see your own provider, inform him/her that you work with these animals and any other pertinent information regarding your research work.
- 6. **Allergies:**
 - The major sources of rat allergen exposure appear to be from the urine and saliva. The major mouse allergen is found in the urine. If you have suspected allergy symptoms, such as a runny nose and sneezing (allergic rhinitis), irritation and tearing of eyes (allergic conjunctivitis), asthma, or skin rash (atopic dermatitis), contact the Employee Health Clinic at 206-685-1026.
 - Precautions and methods of control to prevent exposure to animal allergenic substances can be found in the NIOSH ALERT, "Preventing Asthma in Animal Handlers". This document can be downloaded at : <http://www.cdc.gov/niosh/docs/97-116/>, and is to be reviewed with personnel.

The Employee Health Clinic is located on the ground floor of the Hall Health Building.
Phone: (206) 685-1026.